"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

The strength of organic glass and its time-dependence. S/804/62/000/011/003/005

required. Following this survey the paper reports new lab tests comprising short-term (ST) and long-term (LT) loading tests of various types of OG, including the effect of LT exposure to atmospheric action and humidity (H). Tensile, bending, and specific-impact-toughness tests. (a) ST loads: 4 Soviet OG's were tested, the "special" aviation-type "C" ("S"), the type A (TU MKhP-1783-53), and types IIA (PA) and IIB (PV) (TU 26-54). Test specimens for the tensile and bending-strength tests, the tensile modulus-of-elasticity (ME) tests, and elongation and impact-toughness tests, were cut out of 8-mm thick OG. Whiskers and other cutting defects were removed, and sharp edges were slightly rounded. The specimens were soaked at 20°C for 24 hrs; the tests were performed at 17°. The ME tests were performed in a 4-load-unload two-stage procedure with a loading rate of 120 kg/cm^2. min. Test results are tabulated in 4 tables. (b) LT loads: The appreciable creep effects during LT-loading tests are noted. The bending-test specimens were 240 mm long instead of 100 mm to minimize the loads required for LT testing, and identical specimens were tested in ST tests for control purposes. The special LT testing equipment is described and shown in a schematic cross-section and a general-view photo. The specimens were treated as simple beams with load application concentrated at mid-span. The bending deflections obtained at lower T do not vary, but, when reduced to normal T by means of the ratio $E_t/E_{20°}$, the values increase with decreasing T. With increasing T the

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the authors term the "critical shear stress." The equipment utilized in the LT tests is shown in schematic cross-section and is described. The results are plotted in terms of angle-of-twist vs. log of loading time. Tests at the 0.15, 0.2, and 0.3 τ_{crit} level were carried out for >300 days, 2 tests at the 0.6 and 0.8 τ_{crit} level for >180 days. The general character of the resulting curves shows that the twist angles increase at appx. the same rate immediately after application of the load and subsequently. Compression tests: The compression-strength characteristics of PS-1 and PKhV-1 were found to be appx. identical in all directions. The strength of the PS-4 in compression was appx. twice as great in a direction perpendicular to the plane of the sheet as in the direction parallel thereto. Since the normal compressive stresses in the central layer of a 3-layer panel are at any rate small, the tests were performed in a direction parallel to the plane of the sheet. Tests were made on PS-1 and PKhV-1 with a unit weight of 100-110 kg/m^3 and on PS-4 with weight of 30-34 kg/m^3. There was no brittle failure in any specimen. Folds formed at midheight of the specimen, but upon attaining a relative deformation in compression of the order of 60-70% the load was found to increase again. In LT strain-vs.-time tests it was found that aftereffect (creep) strains developed primarily during the first 15-20 days, but they were small. This is characteristic of low stress levels only; at stress levels of the order of 0.5-0.6 of

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the critical stress the aftereffects are clearly nondamped. In summary, the LT shear testing FP by means of twisting of hollow cylindrical specimens appear simple, convenient, and dependable, as substantiated by tests on specimens of differing lengths. The aftereffect strain on FP in shear is characterized by LT development of its magnitude, depending on the absolute stress values and the percentual value of the stress applied in terms of the critical stress. Actual stress values to be specified for building applications must be low, not in excess of 0.20-0.25 of the ultimate stress or 0.25-0.35 of the critical stress. Conclusions concerning compression are similar, and the same numerical values for practical application are recommended. Specific numerical values for the Soviet FP tested are listed. In the absence of stress values for FP of a given unit weight, say, in the 60-80 kg/m^3 range, it is recommended that the arithmetic mean value of the standard strengths of FP with a unit weight of 40 and 100 kg/m^3 be employed. There are 14 figures, 2 tables, and 22 references (12 Russian-language Soviet, 5 German, and 5 English-language). Participation in the tests by A. G. Nechayev and V. I. Ivanov, technicians, is acknowledged. The design of the torsional testing machine is credited to lab staff assistant Yu. G. Korabel'nikov.

ASSOCIATION: None given.

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DAIMATOV, V.Ya., kand. tekhn. nauk; SUROV, A.N., inzh.

Utilization of polyvinyl acetate-cement-concrete floors.
Prom. stroi. 43 no.9:9-11 '65. (MIRA 18:9)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

GRATSIANSKIY, Mikhail Nikolayevich, dots., kand. tekhn.nauk; ALEKSANDROVSKIY, Yuriy Vladimirovich, dots., kand. tekhn. nauk; IZOTOV, B.S., dots., retsenzent; SUROV, I.Ye., inzh., retsenzent; BONDAR', F.I., inzh., retsenzent; SAMSONOVA, M.T., red.; VORONINA, R.K., tekhn. red.

[Hydrology and hydraulic structures] Gidrologiia i gidrotekhnicheskie sooruzheniia. Moskva, Gos. izd-vo "Vysshaia shkola," 1961. 351 p. (MIRA 15:3)

1. Kafedra gorodskogo stroitel'stva i khozyaystva Leningradskogo inzhenerno-stroitel'nogo instituta (for Izotov).
(Hydraulic engineering)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

BONDAR', F.I.; YERESNOV, N.V.; SEMENOV, S.I.; SUROV, I.Ye.; KONYUSHKOV, A.M., kand. tekhn. nauk, nauchn. red.; SMIRNOVA, A.P., red.; GOL'BERG, T.M., tekhn. red.

[Special water-intake structures] Spetsial'nye vodozabornye sooruzheniia. [By] F.I.Bondar' i dr. Moskva, Gosstroizdat, 1963. 367 p. (MIRA 17:1)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROV, K., inzhener-arkhitektor

Large-panel housing construction in Sverdlovsk Province. Zhil. stroi. no.11:10-13 N '61. (MIRA 16:7)
(Sverdlovsk Province--Apartment houses)
(Sverdlovsk Province--Precast contrete construction)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

USPENSKAYA, N.V.; ISTRATOV, V.N., kand.tekhn.nauk; DMITRIYEV, S.N.; SUROV, M.G.; BOGATYREV, O.M.; KUPALYAN, S.D., kand.tekhn. nauk; KAMENSKIY, A.V.; KAMENSKIY, A.V.; TIMOFEYEV, A.B.; KHUKHRIKOV, S.S.; ANTONOVA, S.D., izdat.red.; ZUDAKIN, I.M., tekhn.red.

[Collection of problems pertaining to the theoretical ptinciples in electrical engineering] Sbornik zadach po teoreticheskim osnovam elektrotekhniki. Pod red. V.N.Istratova i S.D.Kupaliana. Moskva, Gos.izd-vo obor.promyshl., 1959. 124 p. (MIRA 13:1)

1. Moscow. Aviatsionnyy institut imeni Sergo Ordzhonikidze. (Electricity--Problems, exercises, etc.)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROV, N.A

CA

2

Partial pressure of nitrogen oxides and of water vapor over nitrosos. T. I. Kunin and N. A. Surov (Ivanov Chem. Technol. Inst.). *Zhur. Prikład. Khim.* (J. Applied Chem.) 23, 136-9(1950).—The following data give the compn. of the nitroso (% H_2SO_4 as analyzed, % N_2O_3 as analyzed, % H_2O by the difference), and the corresponding pressures (mm. Hg) of NO + NO_2 at 120, 150, 172, and 198°: (88.0, 4.08, 7.96) 0.27, —, 1.06, and 3.75; (86.9, 5.82, 7.28) 0.33, 1.46, 4.08, and 11.94; (84.3, 8.82, 6.88) 4.33, 11.27, 22.70, and 33.90; (82.4, 10.52, 7.08) 27.80, 42.80, 51.80, and 112.2. With the compn. of the system expressed in % H_2SO_4, N_2O_3, and H_2O, i.e. with the H_2SO_4 concn. of the original acid considered const. (98.8%), the system does not obey Henry's law. If the compn. is expressed as a soln. of $HNSO_5$ in H_2SO_4, in terms of % H_2SO_4, $HNSO_5$, and H_2O, i.e. with the H_2SO_4 concn. of the original acid falling, the partial vapor pressures of H_2O over these nitroses are equal to the partial pressures of H_2O over the original acids. N. T.

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CA SUROV, N.A.

2

The partial pressure of nitrogen oxides and of water vapor over nitroses. T. I. Kunin and N. A. Surov (Ivanovo Inst. Chem. Technol.). *J. Applied Chem. U.S.S.R.* 23, 139–42(1950)(Engl. translation).—See *C.A.* 44, 8756a.
B. L. M.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

[illegible], V.V., MOGILEVSKIY, Ya.M.; NIKOLAYEVA, N.S.; SUKOV, N.A.; MAYBORODA, V.I.; LIN'KOVA, Z.K.; BOCHKINA, V.S.

Properties and production methods of polynosic fibers. Khim. volok. no.6:3-9 '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna. Submitted March 2, 1965.

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L 38119-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6012414 (A) SOURCE CODE: UR/0183/65/000/006/0003/0009

AUTHOR: Mikhaylov, N. V.; Mogilevskiy, Ye. M.; Nikolayeva, N. S.; Surov, N. A.; Mayboroda, V. I.; Lin'kova, Z. K.; Bochkina, V. S.

ORG: VNIIV

TITLE: Properties and methods of making rayon filaments

SOURCE: Khimicheskiye volokna, no. 6, 1965, 3-9

TOPIC TAGS: synthetic fiber, organic synthetic process, textile, textile engineering, textile industry machinery

ABSTRACT: Various patented processes for obtaining viscose fibers similar to cotton were evaluated. Basic technological parameters were worked out for a 1-bath and 2-bath method of forming and drawing xanthogenate filaments. Requirements for construction of spinning equipment were determined. Viscose filaments whose physical-mechanical properties compared to those of foreign rayon filaments of average strength were obtained on pilot equipment. Orig. art. has: 5 tables.

SUB CODE: 11, 13/ SUBM DATE: 02Mar65/ ORIG REF: 003/ OTH REF: 022

UDC: 677.463

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROV, P.N., glav. red.; NEDESHEV, A.A., nauchnyy sotr., otv. za vypusk; ZHERDEV, F.G., red.; KUTS, L.I., nauchnyy sotr., red.; MEL'NIKOV, G.A., red.; AMELIN, N., red.; YURGANOVA, M., tekhn. red.

[Natural resources and prospects for the economic development of Chita Province; materials] Prirodnye bogatstva i perspektivy razvitiia ekonomiki Chitinskoi oblasti; materialy.... Chita, Chitinskoe knizhnoe izd-vo, 1960. 147 p. (MIRA 15:1)

1. Konferentsiya po razvitiyu proizvoditel'nykh sil Vostochnoy Sibiri. Chitinskoye regional'noye soveshchaniye. 2. Chitinskaya kompleksnaya laboratoriya Sibirskogo otdeleniya Akademii nauk SSSR (for Kuts). 3. Nachal'nik proizvodstvenno-tekhnicheskogo otdela Chitinskogo sovnarkhoza (for Zherdev). 4. Direktor kompleksnoy laboratorii Sibirskogo otdeleniya AN SSSR (for Mel'nikov).
(Chita Province--Natural resources)
(Chita Province--Industries)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUKOV, S. [redacted]

Tank for processing color printing paper in the light. Sov. foto 17 no.4:47-48 Ap '57. (MLRA 10:6)
(Color photography)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROV, [illegible]; SUROV, [illegible]

Dye toning. Sov.foto 17 no.6:50-52 Je '57. (MIRA 10:8)
(Color photography)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

BARINOV, L.V.; GEODAKOV, A.I.; GRINEVICH, G.Ya.; IOFIS, Ye.A., kand. tekhn. nauk; KRIMERMAN, P.M.; LAPAURI, A.A.; MINENKOV, I.B.; PANFILOV, N.D.; PELL', V.G., kand. tekhn. nauk; PERTSIK, A.G.; POLYANSKIY, N.N.; POPOV, A.N.; SIDOROV, A.G.; SUROV, S.G.; SHASHLOV, B.A.; TELESHEV, A.N., red.; MALEK, Z.N., tekhn. red.

[Manual for the amateur-photographer] Spravochnik fotoliubitelia. Pod obshchei red. E.A.Iofisa i V.G.Pellia. Moskva, Iskusstvo, 1961. 530 p. (MIRA 15:7)
(Photography—Handbooks, manuals, etc.)

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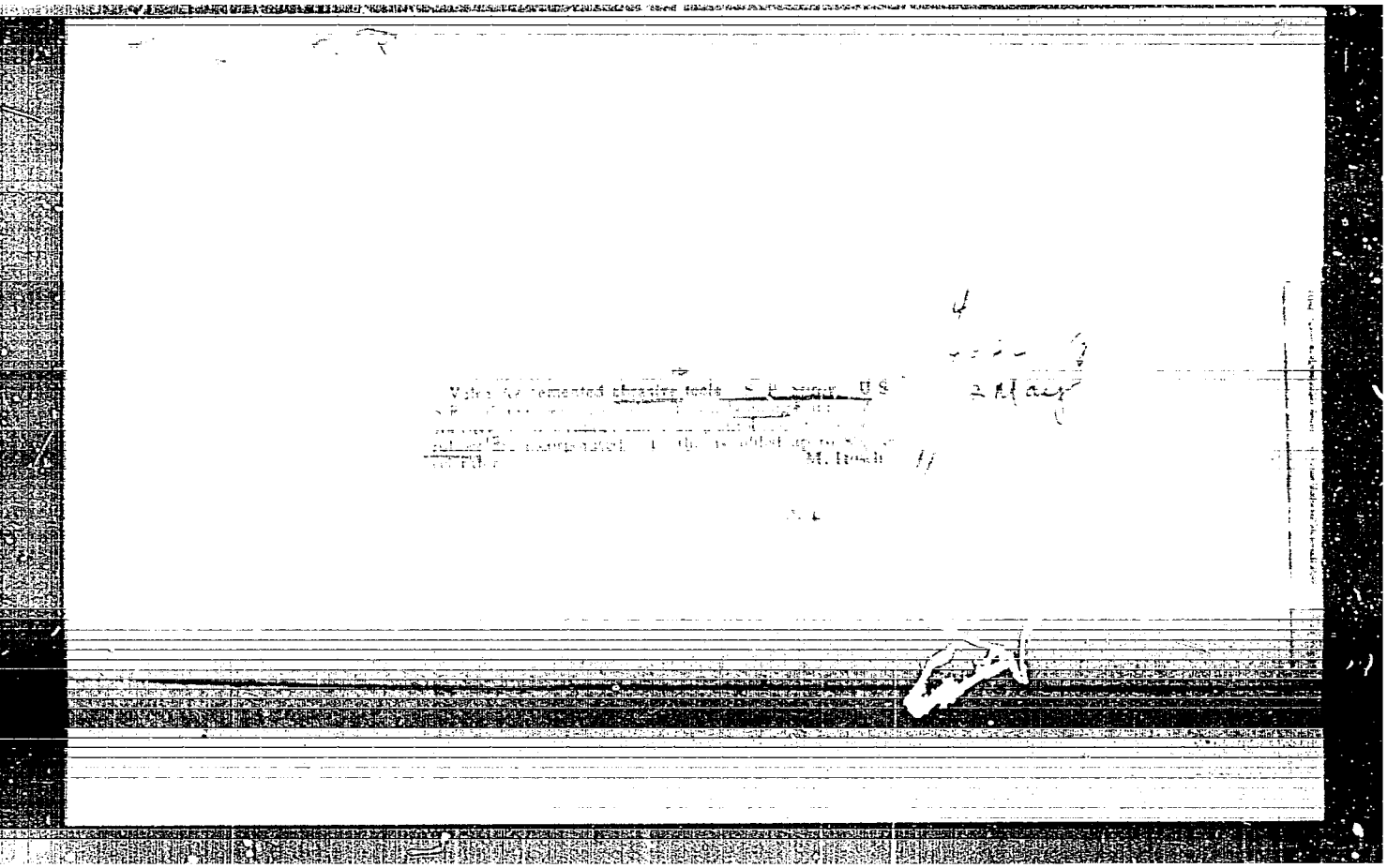
"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3



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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROV, S.P.; NOVIKOVA, Ye.G.; GORYACHEVA, V.V.

Determining the concentration of hide glues by the refractometric method. Zav.lab. 26:111-112 '60. (MIRA 13:5)

1. Ural'skiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta abrazivov i shlifovaniya.
(Glue)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROV, T.

A leading automobile mechanics school. Avt.transp. 34 no.9:34-35 S '56. (MLRA 9:11)

1. Sekretar' partorganizatsii avtoshkoly.
(Riga--Technical education)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROV, V.

According to Kolesov's method. Tekh.molod. 21 no.8:4 Ag '53.
(MLRA 6:7)
(Turning)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROV, V.F.; TRAVIN, O.V.; SHVARTSMAN, L.A., doktor khim. nauk.

New method of studying equilibrium of the metal-slag system.
Probl. metalloved. i fiz. met. no.4:616-620 '55. (MIRA 11:4)
(Metallurgical analysis)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

137-1958-2-2338

Translation from Referativnyy zhurnal Metallurgiya, 1958, Nr 2, p 19 (USSR)

AUTHORS Surov, V.F., Travin, O.V., Shvartsman, L.A.

TITLE A New Method for the Study of the Equilibrium in a Metal-Slag System (Novyy metod izucheniya ravnovesiy v sisteme metall-shlak)

PERIODICAL V sb.: Fiz.-khim. osnovy proiz-va stali. Moscow, AN SSSR, 1957, pp 291-295. Diskus., pp 382-334 (Transl. Ed.N.: 332-334)

ABSTRACT The method is based on the use of radioactive isotopes. A slag of known composition, with a known content of a radioactive element (the distribution of which is studied), is fed in small doses onto the surface of a molten metal, the latter being contained in a crucible hollowed out of magnesite brick. The crucible is surrounded by a dam made of magnesite powder. The interaction occurring between the metal and the slag causes the metal gradually to become saturated with the radioactive element, and the counting rate from the metal samples taken increases. When the counting rate has remained constant for a number of successive metal samples, this is taken as evidence that equilibrium has been attained. The temperature of the metal surface is continuously checked with a pyrometer. To keep the metal from oxidizing, a nitrogen shield is used. This

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A New Method for the Study of the Equilibrium (cont.)

method was used to determine at various temperatures the distribution of P between a low-carbon Fe and a slag consisting of 33.6% CaO, 2.1% Na_2O, 28.4% Al_2O_3, 4.6% SiO_2, 1.8% MgO, 25.0% FeO, 6.3% Fe_2O_3, and 2.1% P_2O_5. The results obtained are quite accurately stated by the equation.

$$\log K_P = \log \frac{(\%P)}{[\%P]} = \frac{16,000}{T} - 6.94 .$$

K_P was determined from the ratio of the counting rate of an original slag sample to the counting rate of a metal sample taken after equilibrium had been attained. This method was used also to determine the distribution of S between Fe and slags consisting of: 1) 50% CaO and 50% Al_2O_3; 2) 45% CaO, 45% Al_2O_3, and 10% MnO. In both cases the heat flow from the Fe to the slag was nearly 40 kcal/gram atom.

I.T.

1. Metal slag systems--Application 2. Equilibrium--Test methods
3. Equilibrium--Test results

Card 2/2

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

The Use of Radio Isotopes When Investigating the Kinetics of Scrap Fusion andSlag Formation in the Scrap-Ore Process. 89-10-22/36

$\frac{dx}{dt} = K_{SCH} (100 - x)^{2/3}$ was experimentally confirmed.

x here denotes the weight of the CaO already dissolved and K_{SCH} the proportionality coefficient for slag formation. There are 4 figures and 2 Slavic references.

SUBMITTED January 15, 1957
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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SOV/ 20-120-3-45/67

AUTHORS: Shvartsman, L. A., Osipov, A. I., Surov, V. F., Gazonov, M. L., Telesov, S. A., Ofengenden, A. M.

TITLE: On the Equilibrium of Sulfur Distribution Between Metal and Slag in Open-Hearth Furnaces (O ravnovesii raspredeleniya sery mezhdu metallom i shlakom v martenovskikh pechakh)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 3, pp.599-60' (USSR)

ABSTRACT: In the analysis of the desulfurization process in such furnaces a clearing up of the dependence of the equilibrium coefficient of the sulfur distribution on the slag composition and on temperature is primarily necessary. If this is known, that minimum limit-concentration of sulfur in the metal can be estimated, which can be reached at optimum kinetic conditions with the respective slag composition. The difference between the actually observed and the equilibrium coefficient of the sulfur distribution is apparently conditioned by the insufficient velocity of mass transfer in the system slag-metal. From a thermodynamical point of view the basicity

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

On the Equilibrium of Sulfur Distribution Between Metal and Slag in Open-
-Hearth Furnaces

of the slag is decisive for the desulfurization. Contrary to current opinion an increase of the concentration of ferrous oxide does not essentially impair the thermodynamical conditions of steel desulfurization in slags of the Siemens-Martin type. At the same time an increase of the said concentration leads to a reduction of the viscosity of the slag and accelerates the processes of mass transfer in it. Fig 1 shows the values of the sulfur distribution coefficients in dependence upon Δ (difference between the mole-number of the basic and the acidous oxides contained in 100 g of slag = a measure of the basicity of the slag according to Grant and Chipman, Ref 1). From this the following fundamental conclusions can be drawn: 1) During the melting period the sulfur content in the slag exceeds the value corresponding to the equilibrium with the metal. This circumstance is caused by the transition of the sulfur from the furnace atmosphere into the slag. The transition of the sulfur from the slag to the metal proceeds slowly, its content, in the metal, however, rises (Fig 1). Moreover, the sulfur transition to the metal is chemically conditioned by

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

On the Equilibrium of Sulfur Distribution Between Metal and Slag in Open-... rth Furnaces

the composition of the just formed slag. Then the slag is acidous. The Δ-values are negative (Fig 1) and the values of the equilibrium coefficients are very small. Figure 1 shows that during the melting period the desulfurization tends towards equilibrium along two ways: a) By the passage of sulfur from the slag to the metal and b) By the continuous change in the amount of slag and its composition. An increase in the amount of slag reduces the sulfur concentration, whereas an increase of the basicity increases the equilibrium coefficient of the distribution. In order to guarantee a combination of thermodynamic and kinetic conditions favorable to a successful desulfurization, such a slag regime must be maintained, in which a) The silicon content in the slag is kept low if possible during the entire melting process, and b) The slag is kept in a sufficiently liquid state. This is achieved by the introduction of liquefying additions, such as agents containing ferrous oxide. There are 2 figures and 2 references, 1 of which is Soviet.

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SOV/20-120-3-45/67

•On the Equilibrium of Sulfur Distribution Between Metal and Slag in Open--Hearth Furnaces

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii
(Central Scientific Research Institute of Ferrous Metallurgy)
Stalinskiy metallurgicheskiy zavod
(Stalino Metallurgical Plant)

PRESENTED: January 9, 1958, by G. V. Kurdyumov, Member, Academy of Sciences, USSR

SUBMITTED: January 9, 1958

1. Open hearth furnaces--Performance 2. Sulfur--Determination
3. Steel--Quality control 4. Slags--Properties

Card 4/4

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SIROV, V. F.: Master Tech Sci (diss) -- "A study of the behavior of sulfur when melting steel in basic open-hearth furnaces heated with high-sulfur gas fuel". Moscow, 1959. 14 pp (Main Admin of Sci Res and Design Organizations of the Gosplan USSR, Central Sci Res Inst of Ferrous Metallurgy), 110 copies (KL, No 14, 1959, 121)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SHVARTSMAN, L.A., doktor khim.nauk; OSIPOV, A.I., kand.tekhn.nauk; ALEKSEYEV, V.I.; SUROV, V.F.; SAZONOV, M.L.; BUL'SKIY, M.T.; TELESOV, S.A.; SKREBTSOV, A.M.; OFENGENDEN, A.M.; GOL'DSHTEYN, L.G.; SVIRIDENKO, F.F.

Studying the kinetics of scrap melting in the scrap metal and ore process. Probl.metalloved.i fiz.met. no.6:326-343 '59. (MIRA 12:8)

(Open-hearth process) (Scrap metal)

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BRAGINENKO, K.N.; GUROV, V.N.

Study of sodium chloroberyllate and of the nature of its reaction with beryllium chloride. Izv. AN SSSR. Neorg. mat. 1 no.11:1982-1989 N '65. (MIRA 18:12)

1. Khimicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova. Submitted June 11, 1965.

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L 7793-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACC NR: AP5027632 SOURCE CODE: UR/0109/65/010/011/2077/2081

AUTHOR: Avak'yants, G. M.; Zuyev, A. V.; Murygin, V. I.; Skripnikov, Yu. S.; Surov, V. P.; Tserfas, R. A.

ORG: none

TITLE: Amplifying and oscillating properties of silicon diodes with gold-doped base

SOURCE: Radiotekhnika i elektronika, v. 10, no. 11, 1965, 2077-2081

TOPIC TAGS: silicon diode, semiconductor diode

ABSTRACT: The results of an experimental investigation of the operation of a silicon diode as a voltage amplifier and as an oscillator are reported. A simple amplifier circuit consisting of a capacitor in series with the diode developed a voltage gain of 18—20 and a power gain of 200—300; its resonance frequency and

Card 1/2

UDC: 621.382.2:546.28:621.375+621.373

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROV, V.S.

KRAVCHUK, L.F., inzhener; OL'SHANSKIY, Ya.A., inzhener; SUROV, V.S., inzhener

Automatic feed-water flow control for boilers in power plants. Energetik 5 no.2:14-16 F '57. (MLRA 10:3)
(Feed-water regulation) (Automatic control)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

MOTORIN, N.; SUROV, Ye.

Homemade synchronizer. Sov.foto 18 no.10:64-65 O '58.
(Photography, Flashlight) (MIRA 11:11)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

TSUKERMAN, S.V.; KUTULYA, L.A.; SUROV, Yu.N.; LAVRUSHIN, V.F.; YUR'YEV, Yu.K.

Basicity of furan, thiophene, and selenophene analogs of chalcone. Dokl. AN SSSR 164 no.2:354-356 S '65. (MIRA 18:9)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo i Moskovskiy gosudarstvennyy universitet. Submitted March 1, 1965.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

L 1991-66
ACCESSION NR: AP5024178

UR/0290/65/000/002/0160/0161
633.88.09 (571.15)

AUTHOR: Surov, Yu. P.

TITLE: Rhodiola rosea productivity of the northeastern Altai area

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya biologo-meditsinskikh nauk, no. 2, 1965, 160-161

TOPIC TAGS: nervous system drug, pharmacognosy, plant growth, plant ecology, soil type, Rhodiola rosea

ABSTRACT: The author surveyed the growth of Rhodiola rosea (golden root), source of a stimulant drug, in 1964 in various parts of the Priteletskiy cedar forests of the Altai 1700—2400 m above sea level. The vegetation period in this region is extremely short (from June to August). High precipitation and low temperatures during the summer months lead to excessive moisture in many of these areas. Optimal conditions for growing Rhodiola rosea are found along the banks of mountain rivers, brooks, and springs, and in adjoining areas having abundant moisture and rich soil. The greatest number of plants per hectare was 57,000, yielding 1599 kg of roots. The

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ACCESSION NR: AP5024178

average root weighs 28 g; the plants attain a height of 40 to 60 cm. Each plant generally produces 4 stems under optimal conditions and no more than 2 stems under poor conditions. The poorest yields were found in mountain tundra covered by detritus or brushwood, where the plants were only 6 to 10 cm high, roots weighed only 7.5 g, and plants produced only one stem. Rhodiola rosea is rarely found below 1700 m above sea level. The author concludes that Rhodiola rosea is abundant in the upper part of the subalpine belt of the Altai Mountains and is particularly plentiful near the river valleys. Orig. art. has: 1 table. [06]

ASSOCIATION: Biologicheskiy institut Sibirskogo otdeleniya AN SSSR, Novosibirsk (Biological Institute of the Siberian Branch, AN SSSR)

SUBMITTED: 02Apr65 ENCL: 00 SUB CODE: LS

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4115

Card 2/2

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, A.

Revise the temperatures used in drying grain for groat. Muk.-elev. prom. 22 no.12:27 D '56. (MLRA 10:2)

1. Smolenskaya oblastnaya kontora Zagotzerno.
(Grain--Drying)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

30901
S/180/61/000/005/011/018
E193/E383

10.7300 1413

AUTHORS: Surova, E.A. and Ivanov, L.I. (Moscow)

TITLE: Investigation of steady-state creep of iron-aluminium alloys at high temperatures by the torsion method

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Metallurgiya i toplivo. no. 5, 1961, pp. 78 - 82

TEXT: Of many theories put forward to explain the mechanism of steady-state creep, that based on the theory of dislocations seems to be most satisfactory. In this connection, the present authors refer to the fact (Ref. 9 - Investigation of creep of α-iron by the torsion method. Symposium of scientific papers on the theory of strength at high temperatures. IMET AN SSSR, Moscow, 1961, pp. 85-93) that an increase in the applied stress brings about a decrease in the activation energy for steady-state creep, which falls from 78 kcal/g.atom to values approaching the activation energy for self-diffusion (approximately 50 kcal/g.atom) owing to the concentration of the dislocation barriers in a dislocation segment of length L increasing to a critical value

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Investigation of ....

$n_L = 1$. At the same time it can be postulated that the energy of formation of dislocation barriers and, consequently, their concentration are related to the magnitude of the internal-stress field in the alloy so that an increase in the degree of lattice distortion should cause a decrease in the energy of formation of dislocation barriers, and vice versa. Hence, it can be postulated that when the degree of the solute lattice distortion is increased by the introduction of an alloying element with a different atomic radius the dislocation-barrier concentration will also decrease to a critical value $n_L = 1$ which, at a low applied stress, will lead to a decrease in the activation energy for steady-state creep. The object of the present investigation was to check this hypothesis by studying steady-state creep of iron-aluminium alloys under low stresses at which the activation energy of steady-state creep of α-iron remains constant and equal to the sum of activation energy for self-diffusion and the energy of formation of dislocation barriers. The experimental alloys contained 0.95 to 29.5 at.% Al.

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E193/E383

Investigation of ....

Creep tests were carried out at 700 - 1 300 °C in vacuum on specimens 3 mm in diameter, 14 mm gauge length, tested in torsion under stresses of 26.6, 65.5 and 133 kg/cm^2. In interpreting the experimental results, the generally accepted expression for the rate of steady-state creep was used

$$U = U_o e^{-Q/RT}$$

where Q is the activation energy for creep, and
U_o is the pre-exponential factor.

Typical results are reproduced in Fig. 1, where log U is plotted against 1/T for the 29.5 at.% Al alloy, tested under a stress of 133 kg/cm^2. It will be seen that in the presence of applied stress, the transition from the α-solid solution to the ordered state occurs not at a single temperature but within a wide temperature interval (920 - 990 °C). It was found also that in the 26.6 - 133 kg/cm^2 stress range, the activation energy for steady-state creep of Fe-Al alloys was stress-independent.

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

Investigation of ....

the present authors point out that the increase in the bond energy of the alloy caused by addition of Al (Fig. 2) and the broadening of the temperature range separating the α-range from the superstructure (FeAl) range (Fig. 1) indicate that the disorder-order transformation has a fluctuating character and that blocks of ordered structure of the FeAl type exist in the α-solid-solution range. Consequently, whereas in the case of pure α-Fe, the movement of dislocations situated in parallel slip planes is retarded owing to the interaction between leading dislocations, movement of dislocations in Fe-Al alloys is probably retarded by the blocks having a superlattice structure of the FeAl type. The height to which a dislocation has to climb to surmount the elastically distorted region, resultant from the action of a block with an ordered structure, will depend on the size of this region. Consequently, the rate of creep should decrease as the size and strength of the fluctuating blocks of ordered structure increase. In other words, as a result of thermodynamical heterogeneity of α-solid solutions in Fe-Al alloys, revealed by the absence of random distribution of Fe and

Card 5/[illegible]

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

Investigation of ....

Al atoms in the lattice, and by the tendency to formation of blocks of ordered structure, Fe-Al alloys should be more creep-resistant than pure α-Fe and this conclusion has been confirmed by the results of the present investigation.
There are 4 figures and 14 references: 9 Soviet-bloc and 5 non Soviet-bloc. The four latest English-language references mentioned are: Ref. 3 - Roser Chans - J. Appl. Phys., 1960, v.31, no. 3, 484, Ref. 6 - N.F. Mott - Nature, 1955, 175, 365; Ref. 7 - J. Weertman - J. Appl. Phys., 1955, v. 26, no. 10, 1213; Ref. 8 - O.D. Sherby, R.L. Orr, J.E. Dorn - J. Metals, 1954, 6, 71 - 79.

SUBMITTED: May 18, 1961

Card 6/8

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

S/659/62/009/000/010/030
I003/I203

AUTHORS Bystrov, L. N., Ivanov, L. I. and Surova, E. A.

TITLE Investigation of creep in α-iron by a torsion method

SOURCE Akademiya nauk SSSR. Institut metallurgii. Issledovaniya po zharoprochnym splavam. v. 9 1962. Materialy Nauchnoy sessii po zharoprochnym splavam (1961 g.), 72–81

TEXT Ideas on the nature of the activation energy of creep and its dependence on stress and temperature are contradictory. The present investigation was conducted in a vacuum for a temperature range from 630° to 900°C. For stresses from 40 to 138 kg/cm² the activation energy of creep is practically independent of stress, and on the average is equal to 77.7 Ckal/g at.. Within the above limits of stress and temperature, the creep of the α-iron is believed to be due to dislocation movements, the activation energy of which is equal to the sum of the activation energies of self-diffusion and to the energy of formation of edge dislocations. When the applied stresses are increased up to 439 kg/cm², the energy of activation drops sharply to 50Kcal/g at. No relationship was found between the temperature and the energy of activation within the limits of stress investigated. A calculation was made of the distribution of torsional stresses throughout the section of the samples under conditions of creep. In the following discussion, A. Ya. Shinyaev reported on creep in nickel and nickel-base alloys, and Yu. P. Romashkin, suggested that the dependence of the energy of activation of creep on defor-

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Investigation of creep in α-iron by a torsion method

S/659/62/009/000/010/030
I003/I203

mation and on previous treatment of the material should be taken into account, the authors of the article did not do this. M. L. Bernshtein pointed out that discrepancies between the results of this work and those of other Soviet authors. There are 3 figures.

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, E.A. (Moskva); BYSTROV, L.N. (Moskva); IVANOV, L.I. (Moskva)

Connection between the elasticity modulus and the creep rate in iron-aluminum alloys at high temperatures. Izv. AN SSSR. Otd. tekh. nauk. Met. i gor. delo no.4:130-134 Jl-Ag '63. (MIRA 16:10)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

KUZ'MINA, N.N.; GALKINA, A.N.; LALETIN, L.V.; SUROVA, G.A.; IGNAT'YEVA, V.V.; DERYABINA, V.P.; CHOVNYK, N.G., kand. khim. nauk, red.; MIKHEYEV, N.I., red.; ANTONOV, V.P., tekhn. red.

[Methods for the analysis of elctrolytes and solutions of galvanic and chemical coatings; a manual for workers in industrial laboratories] Metody analiza elektrolitov i rastvorov gal'vanicheskikh i khimicheskikh pokrytii; spravochnoe posobie dlia rabotnikov zavodskikh laboratorii. Kuibyshev, TSentr. biuro tekhn. informatsii, 1960. 215 p. (MIRA 14:7)

1. Kuybyshev (Province) (Protective coatings) (Chemistry--Laboratory manuals)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

105. Protein Fractions of Blood Plasma in Brucellosis

"The Dynamics of Protein Fractions of Blood Plasma in Relation to the Stage of Development of the Infection Process in Brucellosis," by K. A. Surova, Trudy Kuybishevskogo Meditsinskogo Instituta (Works of the Kuybishev Medical Institute), Vol 5, 1954, pp 291-295 (from Sovetskoye Meditsinskoye Referativnoye Obozreniye, No 20, 1956, p 56, abstracted by K. Gorbunova)

"Forty male and female brucellosis patients aged 16 or more were examined; 55% of the patients were in the acute septic stage of the disease, and 45% in the secondary metastatic stage, having been ill for a long period and having suffered two or more sieges. The total protein content and the amounts of albumin, globulin, and fibrinogen in the plasma were determined, as was the erythrocyte sedimentation rate. A tendency

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to hypoproteinemia, both in the acute septic and metastatic forms of brucellosis, and a tendency to increase in unevenly dispersed fractions, particularly fibrinogen, were established by examination. The globulin content remained normal in the acute septic form and was observed to decrease in the metastatic form. An increase in fibrinogen and a decrease in albumin were observed in the secondary metastatic form." (U)

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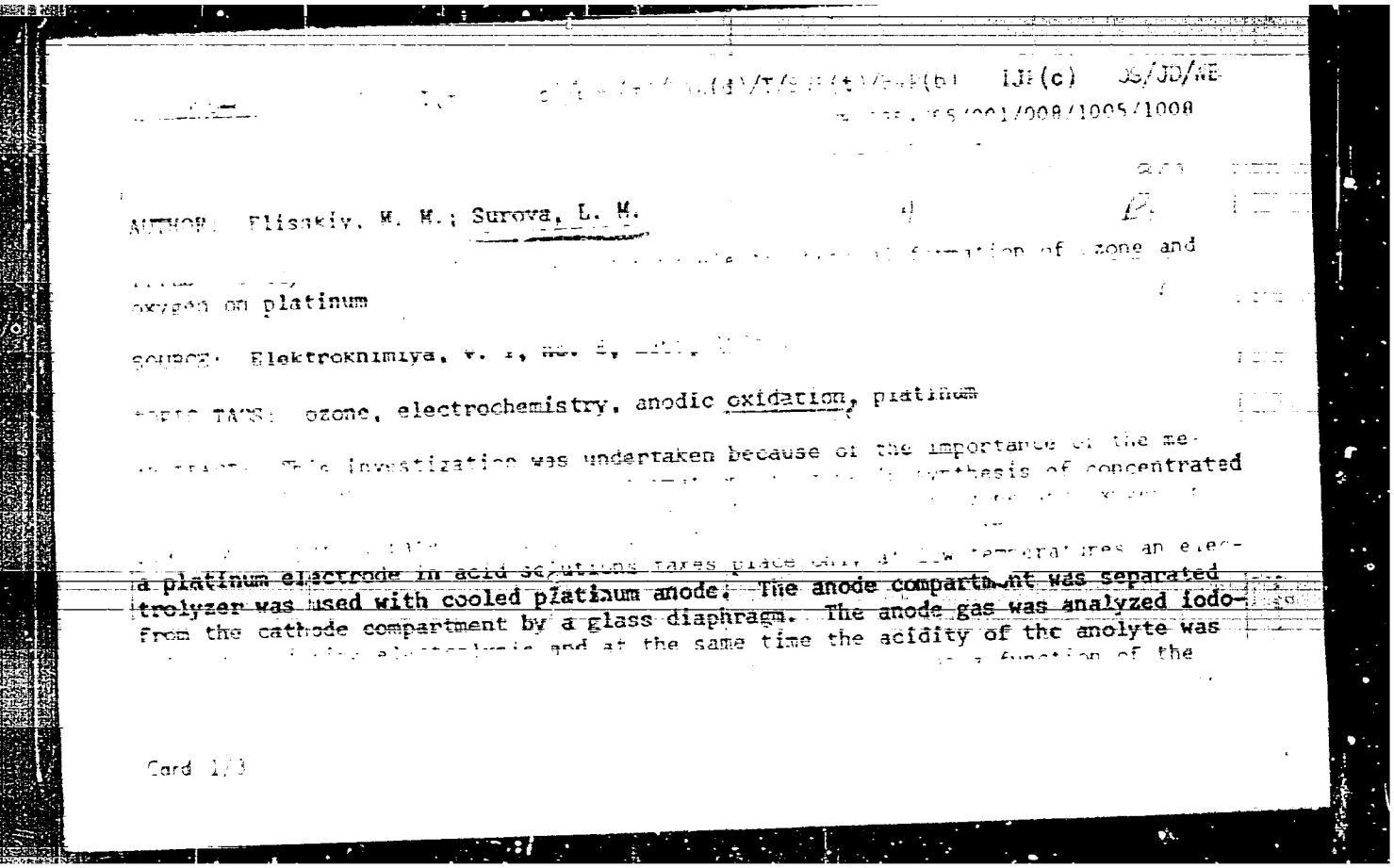

IJP(c) JS/JD/WB

[illegible]/001/008/1005/1008

AUTHOR: Elisskiy, M. M.; Surova, L. M.

[illegible] formation of ozone and oxygen on platinum

SOURCE: Elektrokhimiya, v. 1, no. 8, [illegible]

TOPIC TAGS: ozone, electrochemistry, anodic oxidation, platinum

[illegible] This investigation was undertaken because of the importance of the me- [illegible] synthesis of concentrated [illegible] a platinum electrode in acid solutions takes place only at low temperatures an electrolyzer was used with cooled platinum anode. The anode compartment was separated from the cathode compartment by a glass diaphragm. The anode gas was analyzed iodo- [illegible] electrolysis and at the same time the acidity of the anolyte was [illegible] function of the

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L 5[illegible]

ACCESSION NR: AP5020390

The anode potential must be raised to 3.1 v (corresponding to current density of [illegible] a/cm^2) for production of ozone on platinum. This indicates a significant [illegible] It is believed that highly active chemical [illegible] are of the peroxide type. Ozone is formed [illegible] pounds with water molecules according to the reaction:

$$Pt \cdot PtO[O_2]_{ads} + H_2O - 2e^- \rightarrow Pt \cdot PtO + O_3 + 2H^+$$

[illegible] the kinetics and the mechanism of the anodic process on platinum in perchloric acid solutions is apparently determined by the state of the platinum surface, which [illegible] on the potential and the electrode temperature. Orig. art. has: 3 [illegible]

ASSOCIATION: none

SUBMITTED: 08Feb65 ENCL: 01 SUB CODE: EM, GC

NO REF SOV: 005 OTHER: 003

Card 2/3

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ACCESSION NR: AP5020390

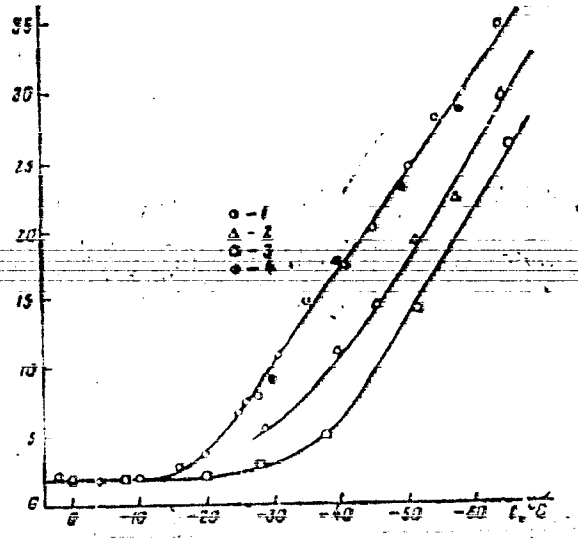

Fig. 1. Current efficiency for liberation of ozone as a function of the temperature of platinum anode in 4.5 N $HClO_4$ solution when the current density is: 1--0.55 a/cm^2; 2--0.28 a/cm^2; 3--0.14 a/cm^2; 4--data of E. I. Lash, R. D. Hornbeck and G. Z. Putnam, *J. Electrochem. Soc.*, 98, 134 (1951). for $i = 0.5$ a/cm^2.

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROV, N.; SUROV, S.

...ye toning. Sov.foto 17 no.6:50-52 Je '57. (MIRA 10:8)
(Color photography)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVÁ, M.

Influence of initiator concentration on molecular weight of poly(vinyl acetate). František Gregor and Magdalena Surová (Výzk. ústav acetylénové chem., Nováky, Czech.). *Chem. průmysl* 9, 325–6(1959).—The polymerization of vinyl acetate (I) was studied at the b.p. of the mixt. I + H_2O with Bz_2O_2 as initiator. The mol. wt. (M) and some properties of the resulting polymer are detd. by the concn. of Bz_2O_2 from 0.10 to 2.0 wt. % Bz_2O_2, M ranges from 260 to 33 × 10^3, resp. J. Sobenda

2 May

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, M. D.

EFFECT OF OXYGEN ADSORBED ON IRON ON THE CONTACT POTENTIAL DIFFERENCE. R. Kh. Burshtein and M. D. Surova. Doklady Akad. Nauk S.S.S.R. 61, 75-8 (1948).--Thermionic current-voltage characteristics were detd. with a W cathode and a pure Fe-wire anode of 0.2 mm. diam., surface area 50 sq. cm., without and with known amts. of O_2 adsorbed on the Fe, preliminarily reduced in H_2 at 600° and heated to 750°. Adsorption of 2×10^{15} mols. O/sq. cm., at 100° shifted the characteristic curve to higher current intensities, by an amt. corresponding to a decrease of the electron-extn. work function φ by 0.6 v. The decrease of φ as a function of the amt. of O_2 adsorbed passes through a max. at this point; it diminishes with further increasing amt. of O_2 ($\Delta\varphi$ = -0.2 v. at 5×10^{15} mols. O/sq. cm.). The curve at 150° has a max. at about 3.6×10^{15} mols. O, $\Delta\varphi \sim$ M -0.48 v.; at 8.2×10^{15} O, $\Delta\varphi$ passes through zero and becomes pos. on further increasing O_2. At 270°, there is a 1st max. at 7×10^{15} O, $\Delta\varphi$ = -0.45, then $\Delta\varphi$ = 0 at about 10.2×10^{15} O, then the neg. $\Delta\varphi$ rises again and passes through a 2nd max. at 11.4×10^{15} O, $\Delta\varphi$ = -0.2 v. becomes $\Delta\varphi$ = 0 at 13.3×10^{15} O and becomes pos. on further increasing O_2. The increase of φ attains over 0.2 v. and then remains const. with further increase in adsorbed O_2. With the Fe cooled in liquid air, the anode attains, in the presence of the incandescent W cathode, a temp. of -120°; at that temp., adsorption of O_2 only increasses φ.

N. Thon

Immediate source clipping

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

A

Effect of oxygen adsorbed on iron upon the contact potential difference. R. Kh. Burshtein, M. D. Surova, and I. A. Zaldenman (Acad. Sci., U.S.S.R., Moscow). *Zhur. Fiz. Khim.* 34, 214-23(1950).—The p.d. V between a W cathode and an Fe anode was detd. in an *app.* making it possible to keep W in a vacuum while Fe was adsorbing O_2. After a definite amt. a of O_2 (detd. from vol. reduction) had been adsorbed at temp. T, Fe was cooled to room temp., the vessel was evacuated, W introduced into it, and V measured. The temp. of Fe rose to 95° during this measurement. The true surface S of Fe (wire coil) was detd. from the adsorption of O_2 (cf. C.A. 41, 61545). At T = 100°, 150°, and 270° V increased with a/S to a max. at 0.63 v. and 22 × 10^{14} mol./sq. cm., 0.40 v. and 35 × 10^{14}, and 0.19 v. and 72 × 10^{14}, resp., and then decreased; the original V was reached at about 6 × 10^{14}, 8 × 10^{14}, and 10 × 10^{14} mol./sq. cm., resp., and neg. values of V were observed at higher T (up to 410°) and great a/S. Increase in V means decrease in the work function; this decrease is unexpected and presumably shows that O is adsorbed under the top layer of Fe. The value of a/S corresponding to the max. change in V is nearly equal to the limit of the rapid stage of adsorption of O_2 by freshly reduced Fe (the Fe anode was heated in H at 600° before the O_2 adsorption). If an Fe anode after adsorbing a/S of O at 100° (or 150°) was heated to 150° (or cooled to 100°) and its V detd. at room temp., this corresponded to T of 150° (or 100°). V detd. at −120° (when the anode was cooled with liquid air; app. described) was 0.6 v. greater than without cooling, and adsorption of 10^{14} mol./sq.cm. of O_2 lowered V by 0.18 v. At −120°, O is adsorbed on the surface of Fe and forms an elec. double layer whose neg. side is in contact with air.

J. J. Bikerman

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

1. BERING, B.P. DREVING, V.P. KISELEV, A.V. SERPINSKIY, V.V. SUROVA, M.D. SERPINSKII, V.V.

2. USSR (600)

4. Montmorillonite

7. Absorption properties of montmorillonite clays. Koll.zhur. No. 4 - 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

SUROVA, M. D.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

(6)

Adsorption properties of montmorillonite clays. B. P. Bering, V. P. Dreving, A. V. Kiselev, V. V. Serpinskii, M. D. Surova, and K. D. Shcherbakova. Colloid J. (U.S.S.R.) 14, 133-41(1952)(Engl. translation).—See C.A. 47, 5080c. H. L. H.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
General and Physical Chemistry

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

Surova, M.D.

Effect of carbon tetrachloride on the decomposition of sucrose in a field of ultrasound waves. I. E. Elpiner and [illegible]

[illegible]

v. and an anode current of 200 ma., applied to a [illegible] quartz plate with a concavity leaving a focal distance of 10 cm.), the sucrose decomp., as shown by the appearance in the soln. of reducing substances which increase in concn. [illegible] in 8 min. the [illegible]

[illegible] in acid or alk. [illegible] greatly enhanced [illegible]

[illegible]

[illegible] the amt. of iodine formed reaches a const. level when the concn. of KI is 0.5N or greater. Addn. of Et_2O to an aq. soln. of sucrose and CCl_4 retards the decompn. of the sucrose. Similarly, addn. of a little Et_2O prevents the drop of pH observed in aq. solns. in the presence of CCl_4. No cleavage of CCl_4 by ultrasound takes place in nonaq. mediums.

G. M. Kosolapoff

Inst. Biol. Physics, AS USSR

Translation M-28, 14 Dec 54

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

Surova, M. D.

USSR/Physics - Biophysics

Card 1/1 Pub. 22 - 15/40

Authors : El'piner, I. E., and Surova, M. D.

Title : Acceleration of albumen decomposition processes in the field of ultrasonic waves

Periodical : Dok. AN SSSR 99/2, 243-246, Nov 11, 1954

Abstract : Experiments show that the decomposition of albumen molecules, observed in the field of ultrasonic waves, can be controlled. The chemical processes originating in the ultrasonic wave field and their causes are discussed. Acceleration or inhibition of albumen decomposition processes was found possible through the addition of some organic substances to the solution exposed to the effect of ultrasonic waves. The presence of CCl_4 in the albumen solution exposed to ultrasonic waves and its effect on the accumulation of reducing substances is explained. Nine references; 8-USSR and 1-USA (1943-1954). Table; graphs.

Institution: Academy of Sciences USSR, Institute of Biological Physics

Presented by: Academician A. I. Oparin, June 28, 1954

Translation M-841, 26 Oct 55

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, N.V.

23440 Cpyt raboty po kartofelyo s-d l ogorod, 1949, No 7, c. 49-52

SO: LETOPIS NO. 31, 1949

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

L 20125-65 EWI(j)/EWT(m) Pb-4 SSD/AFWL/AMD

ACCESSION NR: AR4039383 S/0299/64/000/008/M022/M022

SOURCE: Ref. zh. Biologiya, Abs. 8M132

AUTHOR: Kaplichnikov, M. M.; Sushko, N. G.; Skryabina, E. G.; Surova, N. G.

TITLE: Biological evaluation of preserved bone marrow viability in an experiment

CITED SOURCE: Sb. III Vses. konferentsiya po peresadke tkaney i organov, 1963. Yerevan, 1963, 202-203

TOPIC TAGS: rat, bone marrow, preserved bone marrow, viability, radiation exposure, radioprotective agent

TRANSLATION: Methods and results of investigating the viability and biological activity of bone marrow preserved at a temperature ranging from +3 to -5° are presented. With supravital staining and luminescent microscopy it was established that the number of live bone marrow cells preserved for periods of 5, 10, and 15 days corresponds to 73, 52, and 29% respectively. In rats irradiated with 600 r,

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L 20125-65
ACCESSION NR: AR4039383

70-75% of the cells survived with intravenous administration of isologous bone marrow preserved for 1 week.

SUB CODE: LS ENCL: 00

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SUROVA, N. N.

Surova, N. N. - "Double span outlet in a channel of a trapezoidal section," Trudy Sredneaziat. nauch.-issled. in-ta irrigatsii, Issue 73, 1948, p. 37-41

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, N.N., kandidat tekhnicheskikh nauk.

Measures against alluvial deposits in planning dams with water barriers. Gidr.stroi. 22 no.6:23-26 Je '53. (MLRA 6:6)
(Dams)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, N.N., kandidat tekhnicheskikh nauk.

Results of investigations of several design variants for hydraulic installations in the lower courses of rivers. Vop.gidr. no.1:129-136 '55. (MLRA 9:12)

(Hydraulic enginering) (Rivers--Regulation)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SOV/124-57-4-4283

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 61 (USSR)

AUTHOR: Surova, N. N.

TITLE: On the Methodology of the Model Simulation of Local Erosion Scouring Downstream of Hydraulic Structures (K voprosu o metodike modelirovaniya mestnykh razmyvov za gidrotekhnicheskimi sooruzheniyami)

PERIODICAL: Dokl. AN UzSSR, 1955, Nr 11, pp 45-49

ABSTRACT: The paper analyzes the model simulation of the local erosion of a stream bed on the strength of the results of laboratory investigations conducted with sands of various grain sizes (from 0.1 to 3.3 mm in diameter), ash, and locomotive scale. The author assumes that the erosion depends on the ratio of the momentum flux (per second) of the stream, where the flow leaves the apron, $\alpha_0 g v \gamma / g$, and the momentum of the soil particles capable of resisting erosion, $[(\delta - 1)/g] 1/4 \pi d^3 u$, where u is their hydraulic dimension and v is the velocity at the limit of their adhesion. It is also assumed that the erosion depends on the relative pressure head against the structure and the roughness of the stream bed. On the basis of the experimental results developed the author suggests the empirical relationship for the depth of erosion

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On the Methodology of the Model Simulation of Local Erosion (cont.)

$$t = 0.5\ M\sqrt{H}\ \sqrt[5]{a_0 q v}$$

From this formula the dimensionality of the parameter M, which depends on the specific weight of the soil particles and their geometric and hydraulic diameter, is determined. The author suggests that the selection of the material for the bottom of the model be made on the above basis. It should be noted that the author committed an inaccuracy in deriving formula (2): In order to obtain a dimensionless expression, the momentum of the flow must be multiplied by the time; in accordance therewith the scale of the coefficient M will have to change. The methodology of the model simulation of stream-bed erosion suggested in the paper under review is based on an empirical relationship obtained as a result of experiments in a relatively narrow range of values of the determining factors and with predominantly fine-grain materials.

I. I. Levi

Card 2/2

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

3644. Surova, N. K., A circular spillway outlet (in Russian), *Gidrotekh. Stroit.* 24, 7, 38–39, 1955.

Scale-model study of a circular fan-shaped spillway capable of dealing with a normal discharge of 70 m^3/sec (2520 cu ft/sec) and a maximum storm discharge of 240 m^3/sec (8640 cu ft/sec). The study is aimed at the greatest possible dissipation of energy in order to reduce scour down stream.

A. G. Foster, England

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, N.N., kandidat tekhnicheskikh nauk.

Problem of local scour behind horizontal reinforcement of the downstream side. Gidr. stroi. 26 no.2:40-41 F '57. (MLRA 10:4)
(Dams) (Hydraulic engineering)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, N.N.

Variations in the values of λ_t caused by various lengths of horizontal strengthening. Izv. AN Uz. SSR.Ser.tekh.nauk no.1: 59-64 '58. (MIRA 11:6)

1.Institut vodnykh problem i gidrotekhniki AN UzSSR.
(Hydrodynamics)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, N. N.

Examples of modeling local wash-out in the lower race of hydraulic structures constructed on loose soils. Izv. AN Kazakh. SSR. Ser. energ. no.2:113-127 '62. (MIRA 16:1)

(Hydraulic structures)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, N.N.

Results of the study of various systems for grouping the dams of the Takhia-Tash Water-Power Development. Izv. AN Uz. SSR. Ser. tekh. nauk 7 no.3:66-70 '63. (MIRA 16:6)

1. Institut vodnykh problem i gidrotekhniki AN UzSSR.
(Amu Darya--Dams)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

15-57-5-5757

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 5, p 8 (USSR)

AUTHOR: Surova, N. P.

TITLE: The Lower Cambrian Lena Series in Yakutiya (O lenskom yaruse nizhnego kembriya Yakutii)

PERIODICAL: V sb: Voprosy geologii Azii. Vol 1, Moscow, Izd-vo AN SSSR, 1954, pp 466-483.

ABSTRACT: It is now thought possible to subdivide the "Protolenus zone" of Yakutiya into a number of independent units on the basis of a study of trilobites collected from the zone. Each subdivision is fully matched up under a definite zone. The author remarks on the duration of evolution of the fauna that is distinctive of the Protolenus zone and on the distribution of these forms around the world. Drawing attention to these paleontological features, the author believes it necessary to differentiate Protolenus zone as the Lena series. The boundary of the Lena series is defined more precisely:

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ALEKHIN, F.K.; ALOTIN, L.M.; ALTAYEV, Sh.A.; ANTONOV, P.Ye.; BEVZIK, Yu.Ya.; BELEN'KIY, D.M.; BRATCHENKO, B.F., gornyy inzh.; BRENNER, V.A.; BYR K[illegible] V.F.; VAL'SHTEYN, G.I.; YERMOLENOK, N.S.; ZHISLIN, I.M.; IVANOV, V.A.; IVANCHENKO, G.Ye.; KVON, S.S.; KODYK, G.T.; KREMENCHUTSKIY, N.F.; KURDYAYEV, B.S.; KUSHCHANOV, G.K.; MASTER, A.Z.; PREOBRAZHENSKAYA, Ye.I.; ROZENTAL', Yu.M.; RUDOY, I.L.; RUSHCHIN, A.A.; RYBAKOV, I.P.; SAGINOV, A.S.; SAMSONOV, M.T.; SERGAZIN, F.S.; SKLEPCHUK, V.M.; USTINOV, A.M.; UTTS, V.N.; FEDOTOV, I.P.; KHRAPKOV, G.Ye.; SHILENKOV, V.N.; SHNAYDMAN, M.I.; BOYKO, A.A., retsenzent; SUROVA, V.A., ved. red.

[Mining of coal deposits in Kazakhstan] Razrabotka ugol'nykh mestorozhdenii Kazakhstana. Moskva, Nedra, 1965. 292 p. (MIRA 18:5)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

LYUBIMOV, Nikolay Georgiyevich; SUROVA, Vera Arkhipovna;
MIROSHNICHENKO, Vadim Dmitriyevich

[Lamp room attendant] Rabochii lampovoi. Moskva, Nedra, 1965. 151 p. (MIRA 18:7)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

VOROSHILOV, V.N.; DAIEVA, O.V.; YEVTYUKHOVA, M.A.; YEGOROVA, Ye.M.; KUZNETSOV, V.A.; KUL'TIASOV, N.V.; NEKRASOV, A.A.; SUROVA, V.P.; TA[illegible]OVA, T.I. **Prinimali uchastiye BELOVAYA, Yu.N.;** KHRYCHEVA, G.P.; TSITSIN, N.V., akademik, otv. red.; ASTROV, A.V., red. izd-va; LAUT, V.G., tekhn.red.

[Native plants of the U.S.S.R.; brief summary of introduction work in the Main Botanical Garden of the Academy of Sciences of the U.S.S.R.] Rasteniia prirodnoi flory SSSR; kratkie itogi introduktsii v Glavnom botanicheskom sadu Akademii nauk SSSR. Moskva, Izd-vo Akad. nauk SSSR, 1961. 359 p. (MIRA 15:3)

1. Moscow. Glavnyy botanicheskiy sad.
(Plant introduction) (Moscow—Botanical gardens)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, Ye. I.

The white archipelago. IUn.nat. no.8:29-31 Ag '60. (MIRA 13:8)
(Volga Delta--Pelicans)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, Yelena Ivanovna; KHOTILOVSKAYA, L., red.; KUVYRKOVA, L., tekhn. red.

[White archipelago; stories about conservationists] Belyi arkhipelag; rasskazy o zashchitnikakh prirody. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia," 1961. 110 p. (MIRA 14:11)
(Wildlife, Conservation of)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVA, Ye. I

Why does a maral fawn have spots? IUn. nat. no.1:33 Ja '62. (MIRA 15:1)

(Red deer)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

GORBIYEV, T.B.; SUROVA, Yu.V.; ZIL'BERMAN, B.I.

Autovaccination in chronic cystitis. Vrach. delo no.10:141 O '61. (MIRA 14:12)

1. Dnepropetrovskogo instituta epidemiologii, mikrobiologii i gigiyeny i Dnepropetrovskogo lechebno-profilakticheskoye ob"yedineniye No.2.

(VACCINES) (BLADDER--INFLAMMATION)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

BORISOVA, O.F.; KISELEV, L.L.; SUROVAYA, A.I.; TUMERMAN, L.A.; FROLOVA, L. Yu.

Macromolecular structure of transfer ribonucleic acids in a solution. Dokl. AN SSSR 159 no.5:1154-1157 D '64 (MIRA 18:1)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR. Predstavleno akademikom V.A. Engel'gardtom.

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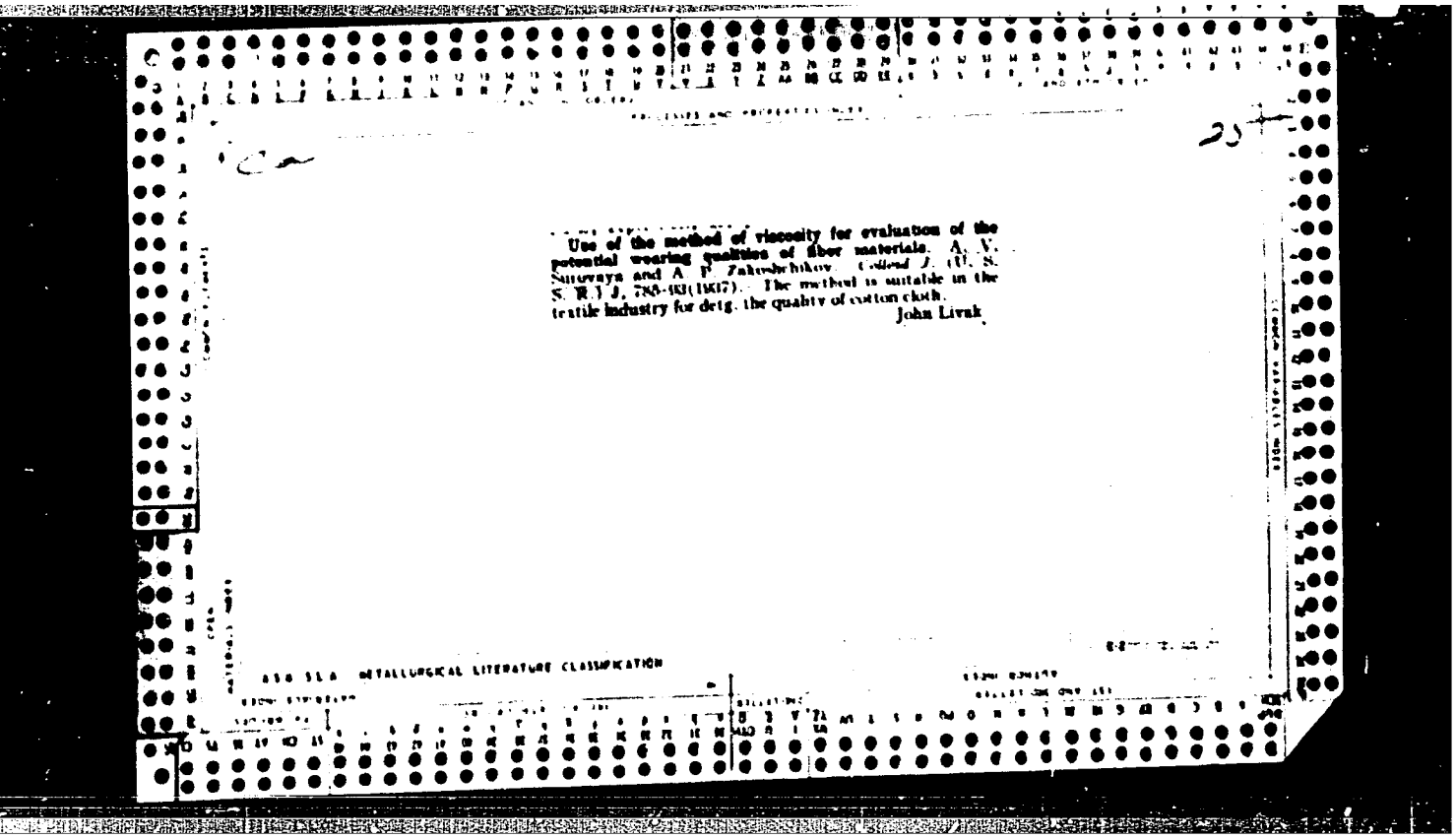

Use of the method of viscosity for evaluation of the potential wearing qualities of fiber materials. A. V. Surovaya and A. P. Zakoshchikov. Colloid J. (U. S. S. R.) J, 785-93(1937). The method is suitable in the textile industry for detg. the quality of cotton cloth.

John Livak

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3"

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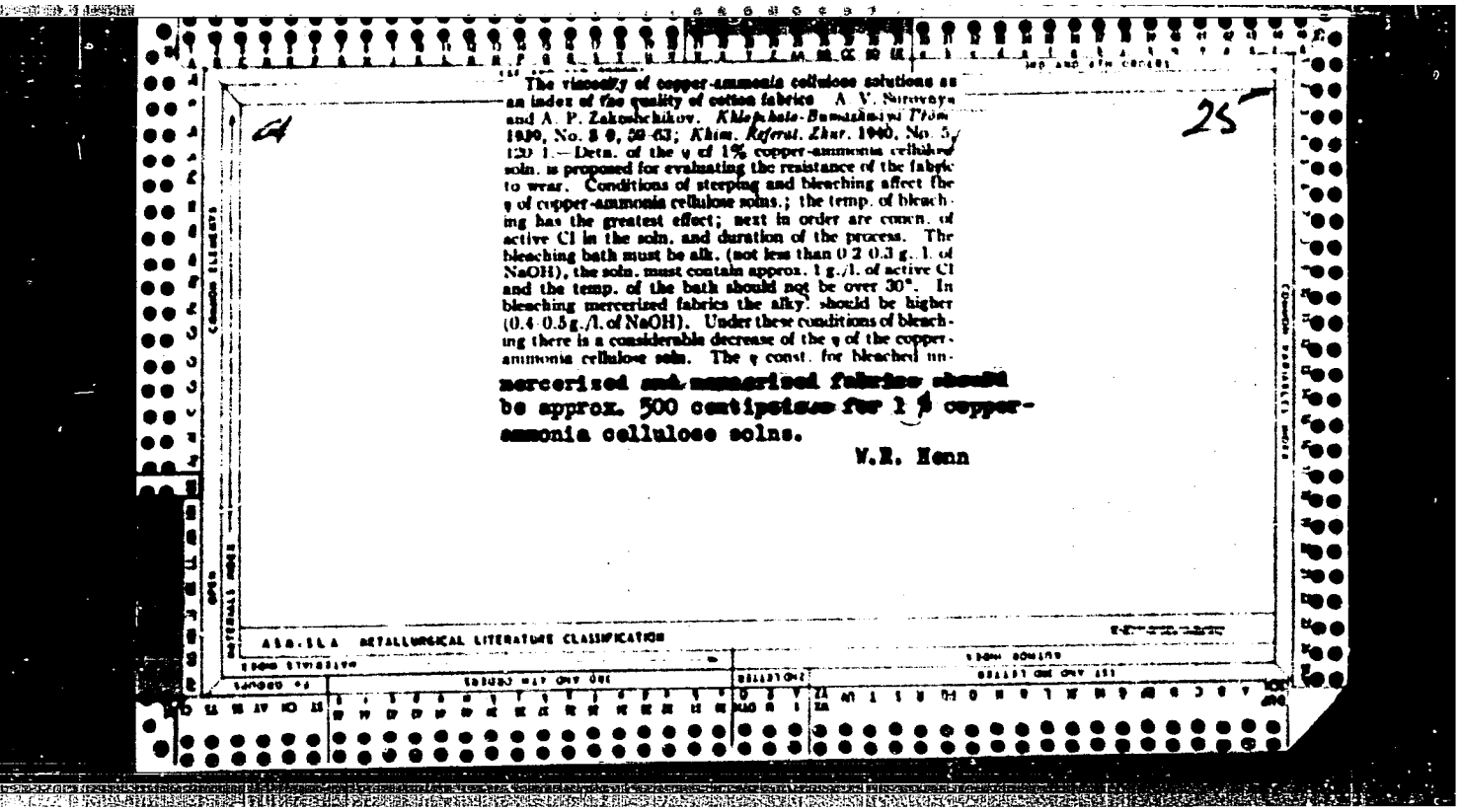

The viscosity of copper-ammonia cellulose solutions as an index of the quality of cotton fabrics A. V. Surovaya and A. P. Zakoshchikov. *Khlopchato-Bumazhnaya Prom.* 1939, No. 8 9, 59-63; *Khim. Referat. Zhur.* 1940, No. 5, 120 1.—Deta. of the η of 1% copper-ammonia cellulose soln. is proposed for evaluating the resistance of the fabric to wear. Conditions of steeping and bleaching affect the η of copper-ammonia cellulose solns.; the temp. of bleaching has the greatest effect; next in order are concn. of active Cl in the soln. and duration of the process. The bleaching bath must be alk. (not less than 0 2 0.3 g. 1. of NaOH), the soln. must contain approx. 1 g./l. of active Cl and the temp. of the bath should not be over 30°. In bleaching mercerized fabrics the alky. should be higher (0.4 0.5 g./l. of NaOH). Under these conditions of bleaching there is a considerable decrease of the η of the copper-ammonia cellulose soln. The η const. for bleached unmercerized and mercerized fabrics should be approx. 500 centipoises for 1 % copper-ammonia cellulose solns.

W.R. Henn

ASB.SLA METALLURGICAL LITERATURE CLASSIFICATION

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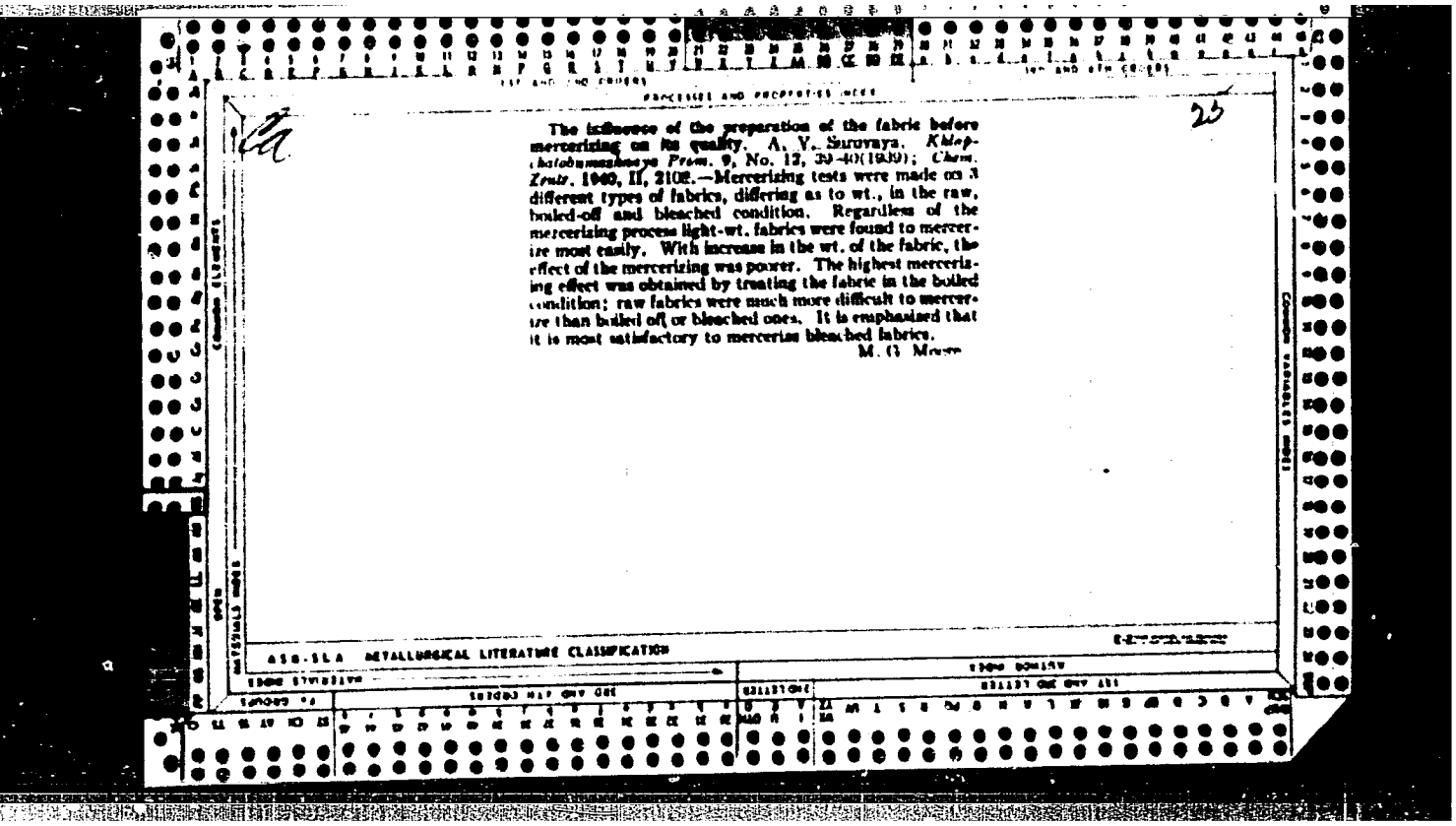

The influence of the preparation of the fabric before mercerizing on its quality. A. V. Suvorova. *Khlop-chatobumazhnoye Prom.* 9, No. 12, 39-40(1939); *Chem. Zentr.* 1940, II, 2102.—Mercerizing tests were made on 3 different types of fabrics, differing as to wt., in the raw, boiled-off and bleached condition. Regardless of the mercerizing process light-wt. fabrics were found to mercerize most easily. With increase in the wt. of the fabric, the effect of the mercerizing was poorer. The highest mercerizing effect was obtained by treating the fabric in the boiled condition; raw fabrics were much more difficult to mercerize than boiled off or bleached ones. It is emphasized that it is most satisfactory to mercerize bleached fabrics.

M. G. Meyer

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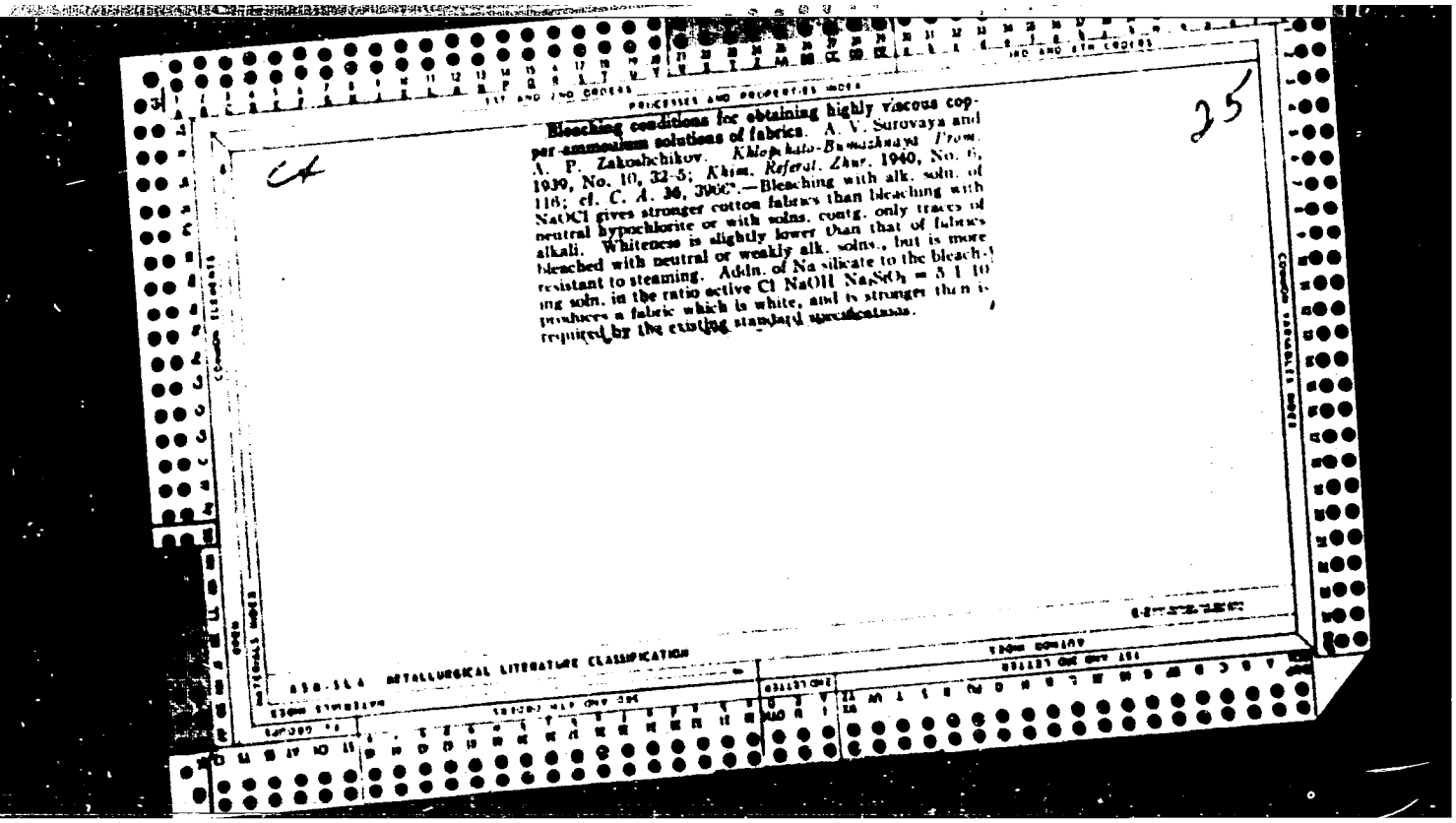
"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3



Bleaching conditions for obtaining highly viscous copper-ammonium solutions of fabrics. A. V. Surovaya and A. P. Zakoshchikov. *Khlopchato-Bumazhnaya Prom.* 1939, No. 10, 32-5; *Khim. Referat. Zhur.* 1940, No. 6, 116; cf. *C. A.* **34**, 3006⁸.—Bleaching with alk. soln. of NaOCl gives stronger cotton fabrics than bleaching with neutral hypochlorite or with solns. contg. only traces of alkali. Whiteness is slightly lower than that of fabrics bleached with neutral or weakly alk. solns., but is more resistant to steaming. Addn. of Na silicate to the bleaching soln. in the ratio active Cl NaOH Na_2SiO_3 = 8 1 10 produces a fabric which is white, and is stronger than is required by the existing standard specifications.

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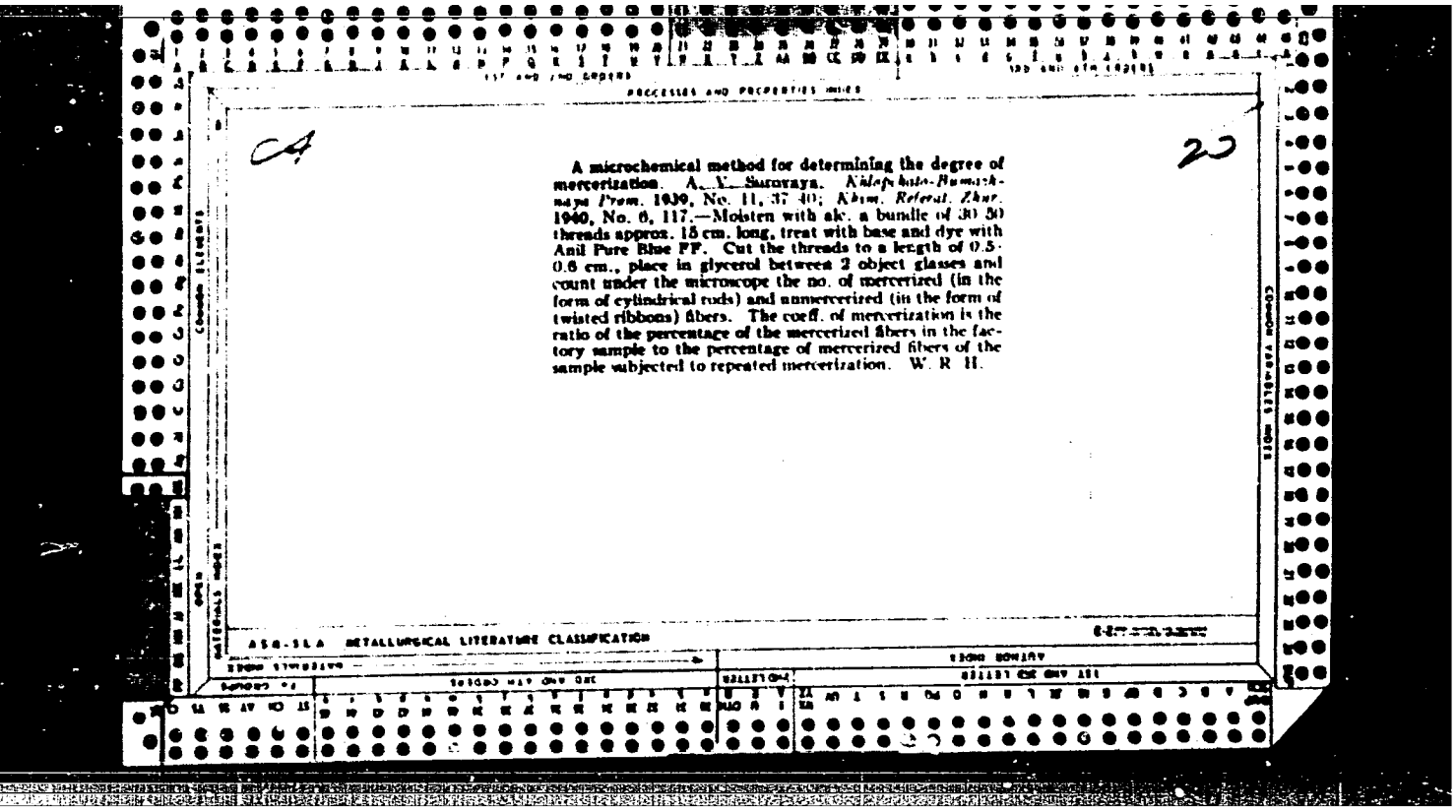

CA 20

A microchemical method for determining the degree of mercerization. A. V. Surovaya. *Khlopchato-Bumazh-naya Prom.* 1939, No. 11, 37-40; *Khim. Referat. Zhur.* 1940, No. 6, 117.—Moisten with alc. a bundle of 30-50 threads approx. 15 cm. long, treat with base and dye with Anil Pure Blue FF. Cut the threads to a length of 0.5-0.6 cm., place in glycerol between 2 object glasses and count under the microscope the no. of mercerized (in the form of cylindrical rods) and unmercerized (in the form of twisted ribbons) fibers. The coeff. of mercerization is the ratio of the percentage of the mercerized fibers in the factory sample to the percentage of mercerized fibers of the sample subjected to repeated mercerization. W. R. H.

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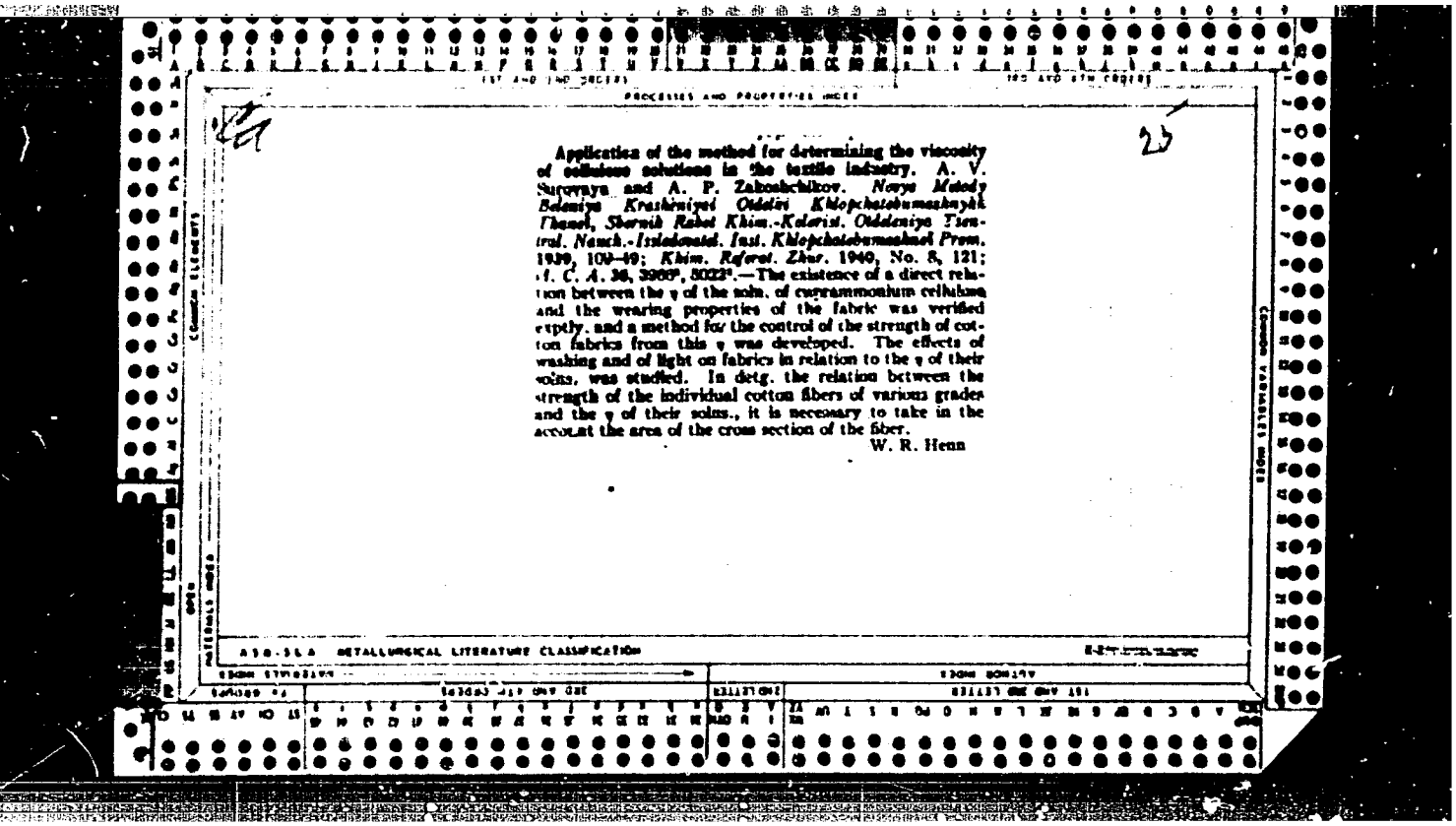
1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

23



Application of the method for determining the viscosity of cellulose solutions in the textile industry. A. V. Surovaya and A. P. Zakoshchikov. *Novye Metody Beleniya Krashéniyai Otdelki Khlopchatobumazhnykh Thanei, Sbornik Rabot Khim.-Kolorist. Otdeleniya Tsentral. Nauch.-Issledovatel. Inst. Khlopchatobumazhnoi Prom.* 1939, 109–49; *Khim. Referat. Zhur.* 1940, No. 8, 121; *A. C. A.* 36, 3966[8], 5022[2].—The existence of a direct relation between the η of the soln. of cuprammonium cellulose and the wearing properties of the fabric was verified exptly. and a method for the control of the strength of cotton fabrics from this η was developed. The effects of washing and of light on fabrics in relation to the η of their solns. was studied. In detg. the relation between the strength of the individual cotton fibers of various grades and the η of their solns., it is necessary to take in the account the area of the cross section of the fiber.

W. R. Henn

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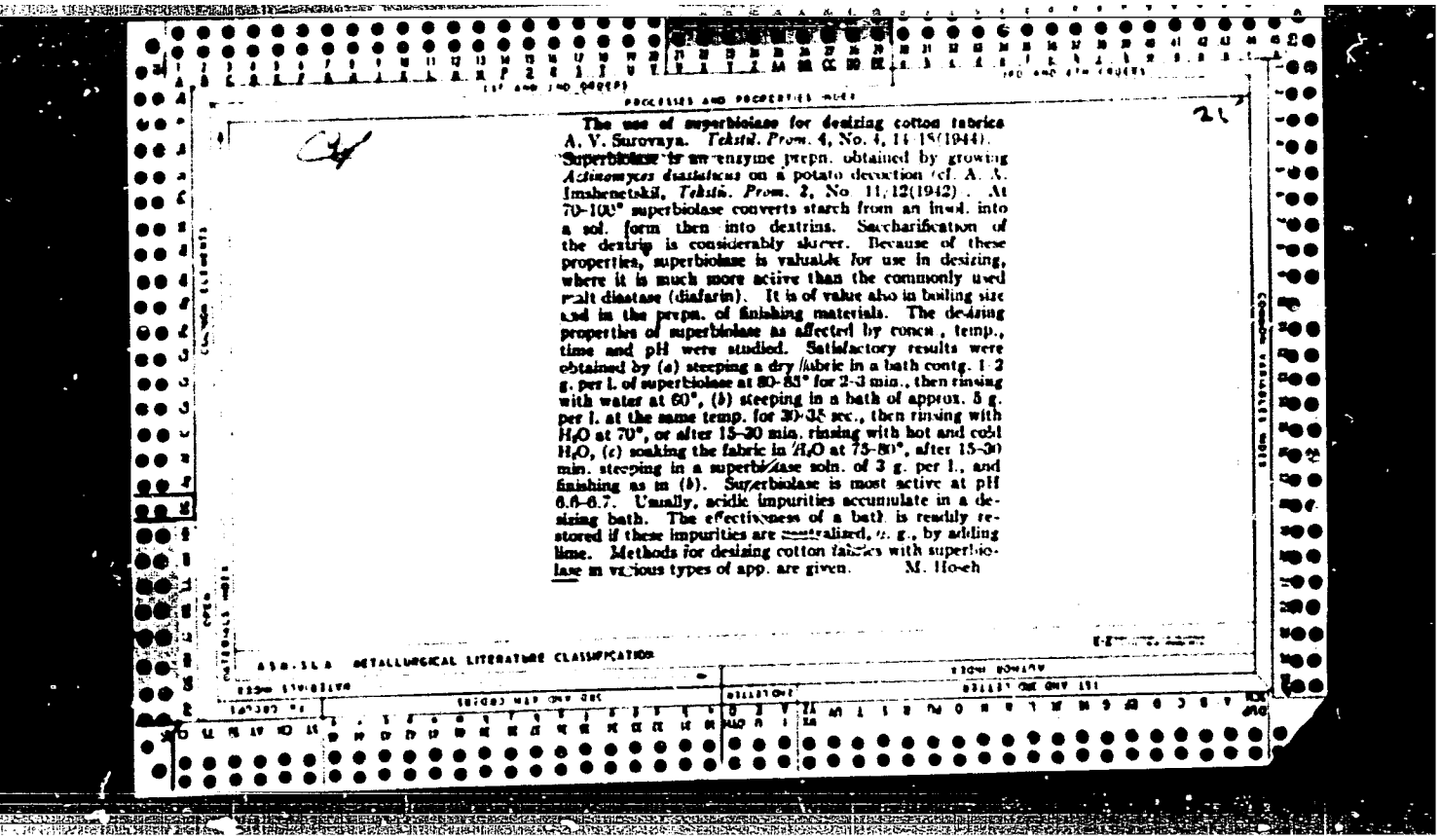

The use of superbiolase for desizing cotton fabrics A. V. Surovaya. *Tekstil. Prom.* 4, No. 4, 14–18(1944). Superbiolase is an enzyme prepn. obtained by growing *Actinomyces diastaticus* on a potato decoction (cf. A. A. Imshenetskii, *Tekstil. Prom.* 2, No. 11, 12(1942)). At 70–100° superbiolase converts starch from an insol. into a sol. form then into dextrins. Saccharification of the dextrin is considerably slower. Because of these properties, superbiolase is valuable for use in desizing, where it is much more active than the commonly used malt diastase (diafarin). It is of value also in boiling size used in the prepn. of finishing materials. The desizing properties of superbiolase as affected by concn., temp., time and pH were studied. Satisfactory results were obtained by (*a*) steeping a dry fabric in a bath contg. 1–2 g. per l. of superbiolase at 80–85° for 2–3 min., then rinsing with water at 60°, (*b*) steeping in a bath of approx. 5 g. per l. at the same temp. for 30–35 sec., then rinsing with H_2O at 70°, or after 15–30 min. rinsing with hot and cold H_2O, (*c*) soaking the fabric in H_2O at 75–80°, after 15–30 min. steeping in a superbiolase soln. of 3 g. per l., and finishing as in (*b*). Superbiolase is most active at pH 6.6–6.7. Usually, acidic impurities accumulate in a desizing bath. The effectiveness of a bath is readily restored if these impurities are neutralized, *e. g.*, by adding lime. Methods for desizing cotton fabrics with superbiolase in various types of app. are given. M. Hoseh

A50-SLA METALLURGICAL LITERATURE CLASSIFICATION

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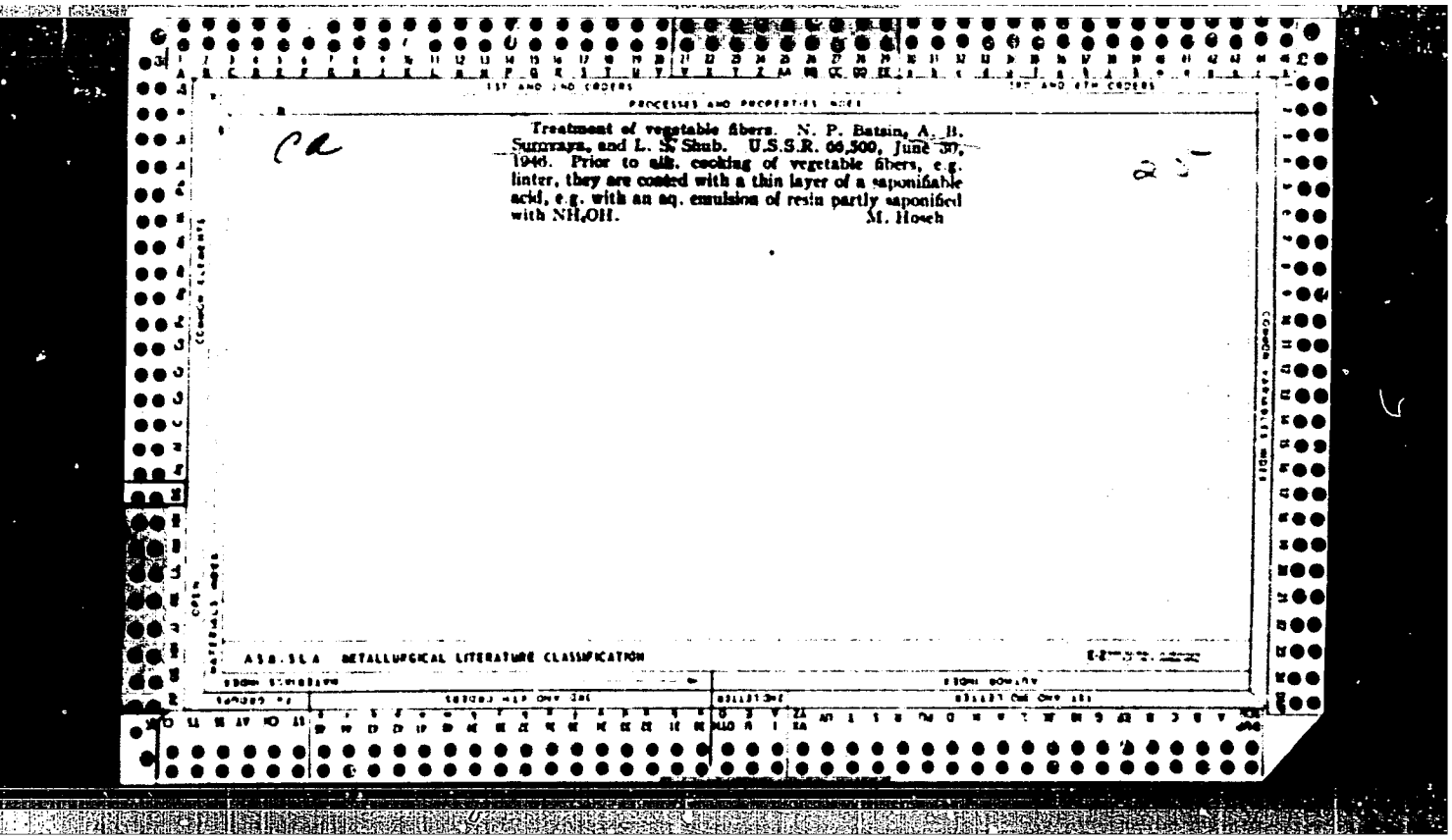

Treatment of vegetable fibers. N. P. Batsin, A. B. Sumrayn, and L. S. Shub. U.S.S.R. 69,300, June 30, 1946. Prior to alk. cooking of vegetable fibers, e.g. linter, they are coated with a thin layer of a saponifiable acid, e.g. with an aq. emulsion of resin partly saponified with NH_4OH.
M. Hosch

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SUROVAYE, A.V.

34037 SUROVAYE, A.V. Zapornyy sposob ochistki
Tkani Tekstil Prom-st; 1949 No. 10 S 20-31
Prodolzh. sleduet

SO: Letopsi' Zhurnal'nykh Statey, Vol. 42, Moskva, 1949

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SUROVAYA, A. V.

36239

Zasarnyy sposob ochistki tkani. Tekstil. prom-st', 1949, No. 11, s. 22-24
Okonchaniye. Nachalo: No. 10

SO: Letopis' Zhurnal'nykh Statey, No. 49, 1949

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SUROVAYA, A.V., kandidat tekhnicheskikh nauk.

Hypochlorite-peroxide bleaching of thread. Tekst.prom. 15 no.11:34-38 N '55. (MLRA 9:1)

(Bleaching)

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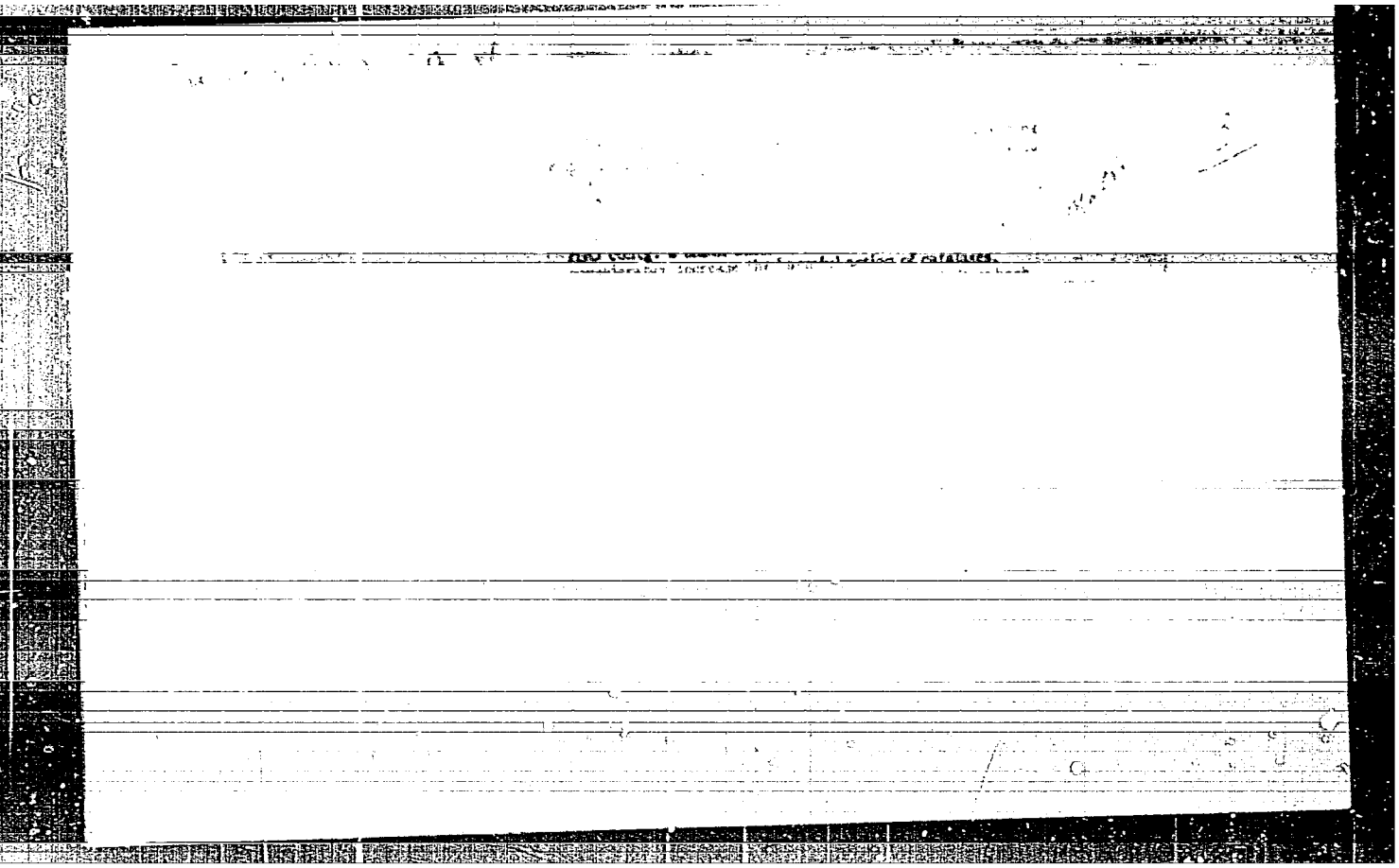

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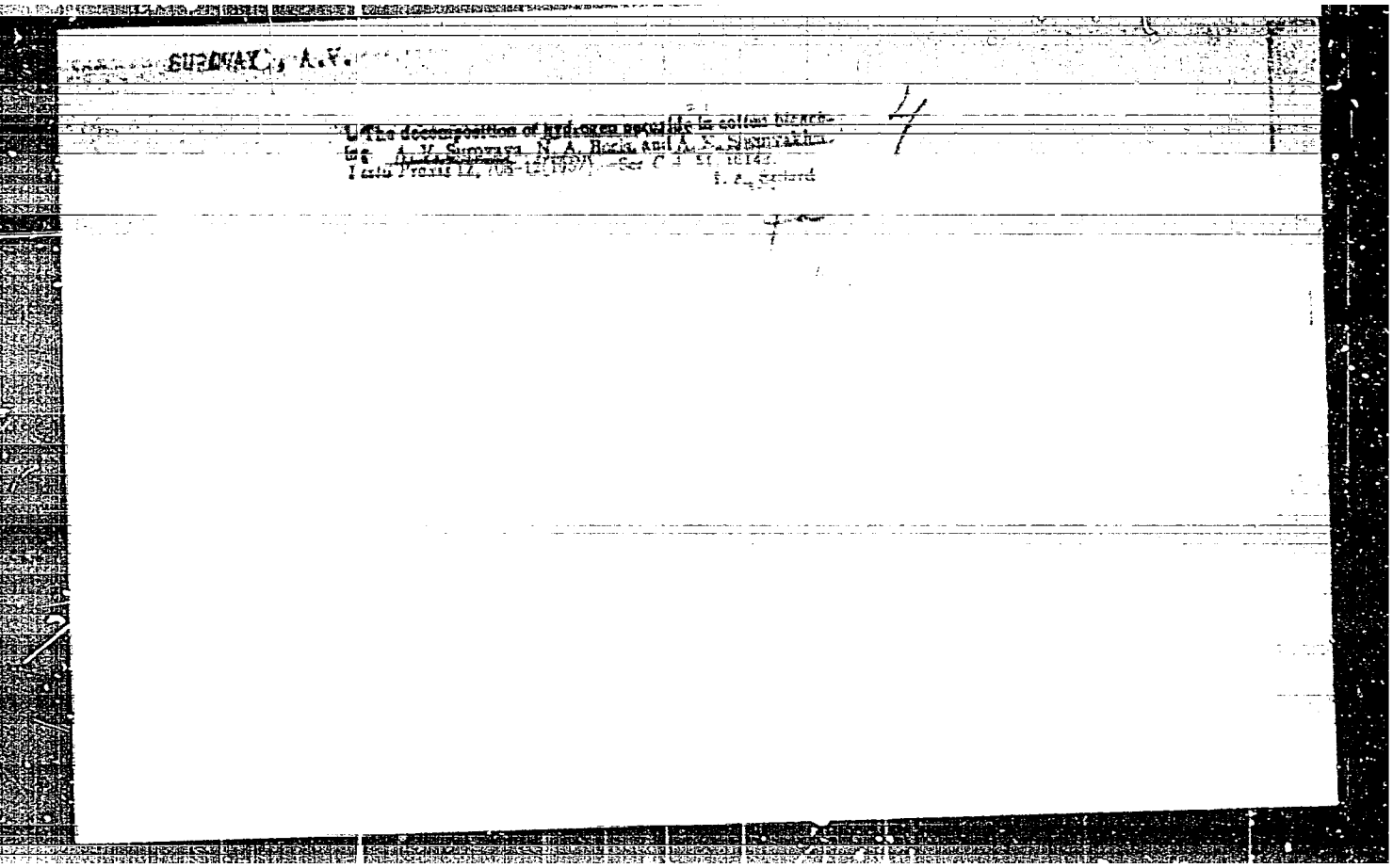

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GOTOVTSEVA, L.A., nauchnyy sotrudnik; SHIKHER, M.G., nauchnyy sotrudnik; SUROVAYA, A.V., nauchnyy sotrudnik

Continuous bleaching of cotton fabrics in an AOZh-2 machinery unit. Tekst. prom. 19 no.5:45-50 My '59. (MIRA 12:10)

1.Ivanovskiy nauchno-issledovatel'skiy tekstil'nyy institut (for Gotovtseva, Shikher). 2.TSentral'nyy nauchno-issledovatel'skiy Institut khlopchatobumazhnoy promyshlennosti (for Surovaya).
(Cotton finishing) (Bleaching)

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SUROVECKY, JOZEF

KOLLAR, Kazimir; SUROVECKY, Jozef

Experiences with differential diagnosis of hospitalized cases of epidemic influenza. Lek. obzor 3 no.1-2:17-28 1954.

1. Z interneho oddelenia MUNZ v Bratislave XII-Prievoz.
(INFLUENZA, differential diagnosis,)

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SUROVEGIN, Yu.V.; ONUFRIYEV, A.V.

Supporting devices of semitrailers. Avt. prom. 30 no.6:43-46 Je '64. (MIRA 17:12)

1. Odesskiy avtosborochnyy zavod.

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SUROVEZHIN, V.B.

Device for lifting cutter holders. Mashinostroitel' no.4: 34-35 Ap '60. (MIRA 13:6)
(Milling machines—Attachments)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVEZHIN, V.B.

Feed magazine with hydraulic control for feeding pipes and rods into machine tools. Mashinostroitel' no.3:16-17 Mr '63. (MIRA 16:4)

(Feed machanisms)

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"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653930010-3

SUROVEZHIN, V.B.

Command device for controlling displacements. Mashinostroitel' no.8:8 Ag '63. (MIRA 16:10)

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